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CONTRIBUTED ARTICLES

Keeping Bees as in the Old Country—Ventilating Langstroth Hives.

BY JOHN E. SCHMIDT.

THIS article is the result of a stroll with my camera out among some of the bee-keepers of Cincinnati. The desire generally strikes me about the time of the year when our honey season is over. No special route is laid out, but just to go out and find some one who keeps bees, and to learn his ideas of bee-keeping, and what result was obtained under his management. Most bee-keepers generally have some hobby, or special way of managing their bees, which they think is the best and only correct way of getting a good crop of honey. No doubt many of these ideas are good, for just such ideas finding their way into our bee-literature are combined either wholly or partly by some bright bee-keepers, and as a result we have as to-day the advanced methods of modern bee-keeping.

Two of these ideas, which I am about to describe here, attracted my attention more than usual, so I promptly adjusted my camera and "fired away."

One pleasant Saturday afternoon, being inclined to take one of these trips, I packed my camera, and as it was only a few hours until dark, my trip necessarily had to be a short one, so I decided to call upon Mr. C. H. W. Weber. As Mr. Weber carries on quite an extensive business it is necessary for him to be located in the city—yes, "right in it"—that expresses it exactly, and he is "in it" in more ways than one, for he also has his apiary of 32 colonies in the city on the roof of his store.

After talking bees for some time, Mr. Weber said: "Come up, and I will show you my bees now"—having seen them a few weeks before. So we started to climb stairs, and after climbing three flights we turned to our right, and there we could view that "city roof-apiary," which has been mentioned so often in our bee-literature, as it was formerly owned by the late Chas. F. Muth.

After keeping bees on this roof for many years with perfect success, Mr. Weber says he is going to arrange them all differently, and has a plan which will protect his bees from the extremes of heat and cold, to which they are subject.

Taking me to one side of the apiary, he showed me a row of hives which he has just completed in arranging according to his plan (see photograph). This row is composed of regular dovetailed hives about five inches apart. They are securely incased, excepting the front, with $\frac{3}{4}$ -inch boards up to the top of the brood-chambers, a space of about five inches being left all around the hives, and this space is tightly packed with chaff or planer-shavings. After they

are packed, boards are fitted in the space between the hives even with the top of the brood-chambers, to keep the packing dry, and make them all rain and snow proof. So far this is nothing more than chaff hives, only on a different plan, but you will notice in the photograph that there is an additional roof over the hives, and is also boarded up in the rear.

The top part of the rear is hinged, and may be raised to allow the sun to shine on the top of the hives in early springtime. During winter, when the cold, unbroken western winds sweep over the house-tops, this arrangement is closed down securely, and the hives are thoroly protected. Weak colonies with plenty of stores will winter just as well as strong ones, and, in fact, every hive in the row will be of uniform temperature, as the heat radiates from one to another thru the chaff between the brood-chambers. The additional roof over the hives is to protect them during the middle of hot summer days.

After explaining the advantages of such an arrangement, Mr. Weber said, in his good-natured German way,



Portion of a Cincinnati Roof-Apiary.

"That's the way they keep bees in the old country." (With emphasis on "that's"). I asked him if he wouldn't have trouble with queens entering wrong hives, as they were all built and looked exactly alike. He said that as he has only 32 colonies, he can easily know the exact condition of each

colony at all times, and thereby replace any queen which begins to fail. This objection being overcome, I think the plan is worth considering by those who keep bees on roofs, or where chaff hives are considered the best to use.

VENTILATING LANGSTROTH HIVES.

The proper ventilation of regular Langstroth hives with tight bottom-boards during the hot summer days is something which bee-keepers using this style of hive have thought of more or less. This is the way a Cincinnati bee-keeper does it—another idea caught on a different occasion. This also did not escape my camera, but it was a close call—cloudy day, 4 p.m., moving bees, quick exposure, and, as a result, trouble in the dark-room—understand, amateurs? Well, to get down to my subject.

You will notice that the front of the brood-chamber (see photograph) is made of two separate boards, the top one being permanent and coming down to within three inches of the bottom-board. The lower half is movable, and slides up and down just in front of the top one. The stick fastened to this movable board is used to regulate the height of the entrance. When warm weather approaches, and the bees begin to hang out and loaf, this movable lower half is raised somewhat, and the stick acts as a prop, and holds it in place. If the bees still continue to hang out, it is raised still higher, until the desired amount of ventilation is obtained, which seldom requires the full height. The entrance can be completely closed by turning the stick slightly, which allows the lower half to come down and rest on the bottom-board.

This arrangement has been used for a number of years, and the bee-keeper says it gives complete satisfaction, as it ventilates the brood-chamber without allowing the heat to escape from the supers, which is of such vital importance in the production of comb honey.

One objection which may arise from using this method of ventilation is this: If it is used in a locality where the temperature is subject to sudden changes, the bee-keeper may be troubled somewhat with chilled brood if the entrance is left open the full height during a cool night. But there are bee-keepers who say "useless consumers" are reared at this time of the year, when ventilation is needed the most, and, even if the brood is chilled, nothing would be lost. Well, I am not going to start an argument by saying there is no such thing as a "useless consumer," as applied to the worker-bee, but I will say I have often noticed that the hives containing queens which rear the most of these so-called "useless consumers" always come thru the winter strong in bees, and have more honey to their credit at the end of the season.

But coming back to our subject again, we should, nevertheless (even if these bees are considered useless), choose the lesser of the two evils caused by ventilation, and undoubtedly the greater of the two is upward ventilation thru the supers, which method often leaves us with little or no surplus at all. Bees need a uniform heat in the supers for



Simple Device for Ventilating Hives.

the production of fancy comb honey, and it is impossible to get such an article with a draft passing thru or directly beneath the supers—a fact which is being acknowledged by more and more bee-keepers every year.

One more thing I would like to mention before closing,

and that is, I noticed that this entrance saves the bees lots of time, for the incoming bees would alight on the ends of the frames and then pass quickly between them, while the bees in hives having the ordinary entrance spent several seconds before reaching the combs.

Hamilton Co., Ohio.

Marketing Extracted Honey—Making It a Staple

BY R. C. AIKIN.

PERHAPS the readers of the bee-papers will think me cranky on the marketing question—I have written so much on this topic. A crank is a very useful thing.

"Oh, we are the cranks to turn the earth
Into the ways of peace and mirth;
Happy side up, sunny side up—
We will ever turn till it's right side up."

That the marketing of extracted honey is yet in its infancy is true, at least as a table sweet. Recently a buyer who handles much honey told me the great bulk of the extracted honey they handled went to manufacturers. If this is true—and I believe it is—there is not a big field for operation in placing extracted honey on the tables of the masses. We have but to recall that when we eat at restaurants, and such places, we do not find honey on the table, and rarely do we find it on the tables of private families outside of bee-keepers. Honey is indeed a luxury, and *extracted honey more so than comb*.

Must we acknowledge that there is by all odds more of comb honey eaten as a sweet than of extracted? It surely looks that way. Mr. E. R. Root, in a paper before the Philadelphia convention, estimated that the annual production of comb honey was perhaps 50,000,000 pounds, and that of extracted probably twice as much, or 100,000,000. I also glean from the bee-papers of late, that there are single firms that consume from 200,000 to 300,000 pounds. If such large quantities be used by single manufacturers, surely the great number of firms consuming in baking, and the many other uses to which honey is put in the arts, there must be but a small portion of the 100,000,000 pounds that gets to the table as a syrup. Knowing that the great bulk of comb honey is used on the table, and yet it is a very rare article among the masses, we must conclude that extracted is comparatively unknown to the great bulk of consumers of sweets.

I began here about eight years ago to sell extracted honey, and a few hundred pounds was all that was sold in the community, but now I can sell almost as many thousands as I then did of hundreds. My local trade has increased year by year, until now I can sell almost a carload a year to a village of less than 2,000, together with the surrounding farm community. Even at this rate there are many families who do not use honey, and many others that use it only as a luxury now and then.

That there is a very large percent—yes, the great majority—of our population who do not use honey, is a fact. Those people who do not would use it if it were as accessible as other sweets, and compared favorably in price. I make this statement without fear of successful contradiction. I have proven it right here, and others have done the same thing in other localities.

WHY IS HONEY NOT USED?

A business man who is always out of certain goods can not expect a good trade in that line. Honey is *not* kept by even the majority of stores, either comb or extracted, *regularly* and at prices to compare with other sweets of the same grade, while the other sweets are in *all* stores. How long would a store do business if sugar and syrup were not kept in stock, except in cities large enough to run with a limited line in any one store—the various stores making a specialty of certain goods? A common country or village store, and as well the greater part of city stores, could not hold their customers if they did not keep staple sweets. Honey must be kept in stock and offered *regularly* as other goods to be regularly used. These are self-evident truths. Any one who attempts to make a staple sweet of honey and not keep it in stock, will surely fail. Failure along this line is common—very common—with grocers as well as with bee-keepers, in working up a honey-trade.

Another reason why people do not buy extracted honey is because it is too expensive—there is too much expense between production and consumption. From here to Chicago the present rate on extracted honey is 97 cents per hundred pounds. Suppose I ship 10 cases of honey to any dealer there, and charge him 6 cents f. o. b. here, he pays

97 cents per 100 gross weight, which is just about even \$13 on the lot. A lot of 1,200 pounds at 6 cents is \$72; plus \$13 freight, and the honey costs on the car at Chicago 7½ cents per pound.

If the buyer in the city puts his money into the honey he will not want to sell again for a bit less than 10 percent advance, perhaps usually not less than 20 percent. If he were selling to manufacturers in original packages and in large lots the margin may be quite small; but if it goes for table use, and he sells in the original package to go into families by the 60-pound can, there can not be less than 30 percent added—the wholesale dealer 10, and the retailer 20. Cost of honey—10 cases—on car in Chicago, \$85; plus 30 percent for dealers, total \$110.50; or about 9 1/5 cents per pound it costs the consumer.

To repack this honey would cost quite a little, but I scarcely know how much to estimate, much depending upon the equipment for doing the work; we will drop that item and see about cost of packages. The very cheapest tin package will cost at least one cent per pound, while glass packages cost from 3 to 4 cents per pound. This makes the cost of the honey about an average of 12½ cents per pound when it gets to the consumer.

Extracted honey shipped to market in 60-pound cans and repacked for retail trade costs the consumer at least 12½ cents, many times considerably over this—12½ is very conservative. Now buy 6 cents worth of granulated sugar and make a syrup by adding a little water, then place this beside 12 cents worth of honey and see how many customers will buy the sugar rather than the honey. Sugar competes with extracted honey, and there is no use in ignoring the fact.

THE REMEDY IN THE MATTER.

The producer must pack his honey in retail packages and case it in some way that it may be handled cheaply. One great trouble with apiarists themselves is, first putting up honey in barrels or 60-pound cans, then later repacking it for retail, melting when candied, and also taking back that which candies in stores. All this is piling up cost on the consumer, or reducing the profits of the producer. The producer of extracted honey needs a storage-tank between the extractor and the marketing-package in all cases. After settling, draw from the tank into retail packages, and let it candy as quickly as it will, then sell in the candied condition.

Consumers will buy it candied, and liquefy for themselves, and many want it candied when spread on their bread. People buy new things because they are always wanting "something new," and if 'tis new to buy candied honey they will do it and soon learn to melt it. I sell my extracted honey in lard-pails nicely painted and stenciled—that is, I used to—now our pails are lithographed. This is the cheapest package, and nice, and with the honey candied there is no drip or leak. In my home market the prices are very close to that of granulated sugar, the honey being sold when candied. I do not put liquid honey in stores, and my honey sells right along, and is fast becoming a staple.

Larimer Co., Colo.

The Season of 1899—Other Matters.

BY G. W. DEMAREE.

THE past season has been so disappointing to the bee-interest in these parts that one must make a distinction between the "science" and the "practical" in bee-literature and bee-culture in order to feel enough interest in the matter to talk or write on bees.

Last spring, after the Arctic blast of February, the white clover crop showed up more than an average prospect, and bloomed in season in great profusion, and the bees made a splendid start in the section-cases as well as in the extracting-supers; but a wave of heat in the absence of moisture dried up the clover bloom right in the midst of the beginning harvest. And the result was few finished sections, and a great lot partly filled or not touched.

In the past ten years the little white aster—"last rose of summer"—has gained a foothold here in waste places and on old pasture-lands, and the bees store a surplus in the late autumn, if the weather is propitious.

For the last few years I have adopted the plan of leaving the fall surplus on the hives during the winter months, and extract what the bees do not need just before the white honey harvest begins to show a surplus, the following season. In our climate the honey in sealed combs does not granulate in quantity to hinder the work of extracting in

warm weather. This plan carried out in a climate that will permit extracting of carried-over sealed combs insures strictly *clast* honey. The dark honey—fall and spring—is brought together by this management, and the white clover surplus of June and July is strictly pure, after its class. My dark honey is sold as "fall and spring honey" at a reduced price, and all of it is taken by the home trade. The past fall was even too dry and hot for the drouth-proof white aster, and the flow from this source was below the average.

GETTING UNFINISHT SECTIONS CLEANED.

Bee-keepers are still asking how to get unfinished sections emptied and cleaned by the bees. With me it is only a matter of work and proper management. Prepare the section-cases by clipping the capping from any sections that may have been partly sealed; place a bee-escape board on the hive, or hives, that are selected to do the cleaning; remove the escape from its place, and this will leave a pass-way for the bees to enter the section-case of unfinished sections, while the board practically disconnects the case from the hive below. If the work is done just after the honey-flow has past, it will work like a charm.

TIME BETWEEN FIRST AND SECOND SWARMS.

I was of the impression that the question as to the time that intervenes between the first, or prime swarm, and the first after-swarm, under normal conditions, was settled long ago, but it seems that it doesn't stay settled. In the first place, it should be remembered that changeable weather, cloudy, rain-storms, etc., and in the rare cases when bees under sudden excitement swarm before any preparation has begun, does not enter into the question as to the habit of bees under normal conditions in respect of swarming. According to my experience of a quarter of a century in the apiary, the time between the first and second swarms is about ten days.

No cause, or causes, to interfere with regularity; if you open the hive just after the first swarm issues, you will find at least one queen-cell sealed over, indicating that the oldest of the royal developing family is about eight days old, counting from the time the egg was laid, and in eight more days she will leave her cell, and in about two more days she will be strong enough to bring on the excitement resulting in the first after-swarm.

CLIPPING THE WINGS OF QUEENS.

It seems to be looked upon by many bee-keepers as a manipulation difficult to perform. To me it is a very easy and simple operation. Find the frame that contains the queen, adjust it in your revolving frame-holder, lift the queen from the comb by clasping her wings between the thumb and forefinger of the right hand; now place her legs between the thumb and forefinger of the left hand, and with the scissors clip off about half of one pair of her wings, and let her run back on the comb. Restore the frame in the place it was taken from, and close up the hive carefully, so as to excite the bees as little as possible.

QUEENS FROM ADVANCED LARVÆ.

There are exceptions to all rules, perhaps, and it is not safe to say that queens reared from advanced larvæ are always inferior. I once had a queen hatched in just eight days from the time the cell was started. The case being an exceptional one, I kept a close watch over this queen, and she showed up as good as the average of the best queens in the apiary. Some of the best queens I ever owned were hatched in ten days after the cells were started.

Shelby Co., Ky.

No. 4.—An Apiary—How to Get the Most Out of It in Beeswax, Queens, Etc.

BY "OLD GRIMES."

ALTHOUGH it is looked upon as an incidental, beeswax is a very important product, and in the markets of the world it has a more standard value than honey. There is no substitute that can take the place of beeswax in the many uses to which it is put in the industrial arts, and when we have a pound of wax we know there is more gold in it to the square inch than there is in an equal amount of honey.

Bee-keeping is an industry full of little details, and the neglect of them will have an effect upon the earnings of the apiary, and the detail that seems to receive a little more than its share of neglect is the saving of wax. Old Grimes, in his early days, lived near an honest German bee-keeper,

and he was always saving every little bit of comb, brace-combs, little spurs from the covers, etc., and all thrown into a box kept in a convenient place for the purpose. It is said that example is more lasting than counsel, and in this case it seems to be verified, for I have faithfully followed his example, while if he had given it to me in the form of advice, I would have forgotten it the next day.

Altho some people at the present day put their old combs into a sack, the sack into a washboiler, and the boiler upon the kitchen stove, and boil, the majority of them resort to more improved methods.

The solar wax-extractor seems to be in the line of progression, and improvements are reported from Florida and Colorado. Further improvements may be expected, until there will be nothing for boilers or presses to do.

There is at present a revival of the press method. It is right and proper to make improvements, but the press was in use in the Grimes apiary 15 years ago. If it will get out another pellet of wax it is well to use sunshine, water and pressure; the pellets make ounces, the ounces pounds, pounds dollars, and dollars clothing and food for our person.

The Grimes family are pleased to observe that the old steam-stove wax-extractor is relegated to the relic heap, for of all slow-working vexations, and utterly useless things for an extensive bee-keeper, it was the worst.

To get the most wax from an apiary, it pays occasionally to scrape the frames, honey-boards, and the inside of the hives, and, when old frames are broken up, to be sure they make fine kindling wood, but before using them for that purpose they should be boiled—there is much wax sticking to old frames even after they are scraped seemingly clean.

And here one of the boys at my elbow irreverently remarks that I had better advise bee-keepers to boil all the dead bees. That might be a good plan for certain specific purposes, but as we have worked the dear little bee for all her dear life is worth, it is time we should exclaim, "Requiescat in pace!"

To get the most out of an apiary in working it for queens needs special talents. If a person is a proficient honey-producer it is no sign that he could succeed in queen-rearing. The qualifications for a queen-breeder can be summed up briefly in the following: Order, patience, neatness, application.

We were told some months ago, in one of our bee-papers, how a certain honey-producer, when he wanted to open a hive, kicked the top off, and when extracting the honey allowed the bees by the million to drown in it. In order for such a fellow to succeed in queen-rearing, there would have to be a grand reformation of his feet, his hands, and his head, and probably the latter would be a hopeless task if he is over 25 years of age.

The economical home-rule applied in the Grimes apiary is to secure good queen-cells, and eventually queens, thru the swarming season when it requires but little order, patience, etc. At other times, queens are purchased from well-known, reliable dealers, and it is a waste of honey to buy cheap queens, or to patronize a queen-breeder whose reputation is not establish.

Judging of the scarcity of advertisements in that line, the sale of colonies of bees is not a very extensive business. In trying to get the most out of an apiary by this means, Old Grimes has had some experience. The desire to buy was not equal to the anxiety to sell, and the anxiety of the buyer to bear the price down created a desire to hold, and after quite a little advertising only a few colonies were sold.

Probably the best method of selling colonies for profit was practiced a few years ago by Mrs. Lizzie Cotton, of Maine. Her plan was to sell a fortune-making hive with the bees, and all for the modest sum of \$20! As she catered mostly to a class commonly known as "suckers," the field was in due time supplied, and Lizzie went out of business. There is probably a new crop of "suckers" by this time, but when one is tempted to work the field it is found that the American Bee Journal has such a watchful eye upon the verdant ones that it is doubtful if the scheme would work. The best time to sell bees is upon special occasions, such as stocking a new field, or replenishing a country after a great loss.

The shipping and sale of nuclei from the South to the North ought to be worked up into a good, paying business.

If the bee-keeper desires to sell bees and at the same time hold enough to make the honey-production profitable, he should never sell bees to his nearest neighbor, for every colony the neighbor owns takes just so much from your apiary. The bee-keeper who wishes to make the most out of his apiary should have no rivals within 8 or 10 miles.

CONVENTION PROCEEDINGS

Report of the Chicago Bee-Keepers' Convention.

BY HERMAN F. MOORE.

[Continued from page 6.]

Next on the program was a paper by Mr. H. M. Arnd, of Dupage Co., Ill., on

Marketing Honey and Creating a Demand for It.

Marketing honey is one of the most essential parts of bee-keeping. A failure in the honey crop means the loss of part of your year's labor, but if you sell your product at a loss your entire year's labor is in vain.

I understand that this year's honey-production is less than one-half, but of a superior quality, and yet some bee-keepers have sold their product at the 1897 prices, when there seemed to be an overproduction, times were hard, and all food could be bought at very low prices. Whereas, this year, all kinds of food products—in fact everything, has advanced greatly, and honey should doubly have a big advance, on account of scarcity, quality, and rise in values of goods in general. And yet, these very same men complain that there is no money in honey!

From my short experience I find that it is not difficult to sell A No. 1 honey direct to the consumer at a good price, if you go at it in the right way. A man should be neatly but plainly dressed, as his appearance goes far in impressing the purchaser that he has the genuine article from his own apiary. He must be "up in his business," always willing and ready to answer the hundred and one questions that are apt to be asked. I do not know of anything that will get a person quicker, and more interested, than the bee-subject; nearly all seem to know that the science is full of the miraculous, and are not at all backward in asking all sorts of questions, some of which would stump Dr. Miller or Mr. Doolittle to answer. If you once get people interested you will have no trouble in making sales. Do not hesitate to answer questions, even if at times you have to guess at the answer.

The public in general believes, and some of them think they know, that an imitation comb honey is manufactured, and as I make extracted honey a specialty, I do not argue the point, but sell them the extracted with the understanding that if it is not pure and satisfactory, they can either exchange or return it at my expense. I have had only one lot returned, and that was not even opened, the lady of the house contending that her husband had no right to make the purchase without her consent—that she was the "boss," and I think she was, because the honey came back.

You must send out only superior goods. If you have an inferior article, either sell it to some of your neighbors, or to bakers, at a discount, and tell them that it is not first-class; feed it back to the bees in the fall, or put it in the vinegar-barrel, but never put it on the market as fancy honey.

You must study your trade, and know when to approach certain customers. Some you can sell to at any time of the year, whereas the indifferent honey-purchaser can only be reached successfully after a pay-day, or when the thermometer is down to zero.

If your competitor has good goods, always have a good word for him.

Most of my product goes to Chicago, and by a careful study of my customers, giving them just what they want, and when they want it, I am able to get magnificent prices.

I always sell direct to the consumer, and get all that there is in it. I sell my goods on their own merits, not on the defects of my competitors'. I do not try to compete with South Water street, or the corner grocery, but sell as independently as if I were a "trust." I do most of my business in the down-town district, as I have a large acquaintance there, and can meet them personally. I usually go to such places where I am either known, or I might know their forty-second cousin's aunt; if I am not acquainted I will tell them that I know their relative, and explain my business. I usually have a few sample bottles of honey, and some of my circulars, and place them where I think they

will be most effective. If I do not then make a sale and get some encouragement, I will call again later. Politeness, appearance, and modesty do a great deal in getting a proper interview, which is one-half in getting them interested and making a new customer, who, with proper treatment, will be instrumental in getting some of his friends.

I put up my product in one-gallon and five-gallon tin cans, which I deliver by wagon-express direct to their residences. I also use one-quart and two-quart glass jars, which I deliver direct to their place of business if centrally located. A short time after shipment to a new customer I call on him to find out if everything is satisfactory. I make it a point always to give full-size cans, and filled up to the brim; 12 pounds of honey is considered a gallon, but my customers get nearly 13 pounds. You will find it pays to be liberal with your customers. Always rectify any mistakes, even if you lose at the time, for it will pay in the end, as a reputation for square dealing is worth money to any man.

To create a demand for honey at high prices, you should not sell anything but first-class goods, as such invariably bring new orders. I have as a customer a family that has bought of me \$40 worth of honey within the last two years, and yet I have never seen one of them. Nothing will advertise your goods more than the goods themselves.

The public must be educated as to the uses and benefits of pure honey; there is not one person in fifty but thinks that it is only a luxury of no particular value. If we only could get the people to read and believe our circulars and honey literature, and get the newspapers to print well-written and true articles on the bee, and on honey as a food, I have no doubt that the demand would increase tenfold in a year. I believe that nearly one-half of my customers have lately been convinced that it is not only a delicious but beneficial food.

We have this problem to solve: How can we get our brother bee-keepers to sell their crop for living prices, and at what it is worth, and thus not break down the honey market? In answer, I would suggest that they invest at least \$2.00 per year for information—\$1.00 for the best bee-paper, and the other dollar as dues to some good bee-keepers' association, where he could and would attend the meetings and get the much-needed information.

In these times of monopolies and trusts, when the rich are getting richer, and the poor poorer, we poor bee-keepers will find that the greatest problem for us to solve is, How can the pure-food law be enforced effectively, and drive out of business permanently those mixers of poisons, who for mere gain are not only robbing the public of their hard-earned money, but, more than that, are gradually undermining their constitutions and shortening their lives? If such laws could be enforced, it would greatly improve the demand for our goods, and we would have no trouble to market them at good prices. I believe that every one of us can assist in helping to crush this great wrong by joining the United States Bee-Keepers' Association, and swell its treasury to such an extent that it will enable them to fight the adulteration demons, and use their influence with Congress to put a stop to this great injustice to humanity.

H. M. ARND.

This topic was considered at great length, nearly every one present being personally interested. Many and diverse views were expressed on candied honey and its relation to a honey-trade.

The Hon. A. H. Jones, of Robinson, the newly appointed Illinois Pure Food Commissioner, was introduced to the convention. He made an interesting address, pledging himself to co-operate with all good citizens to prevent adulteration of foods. The bee-keepers congratulated themselves on the presence of Mr. Jones at their meeting, and his evident friendliness to their aims and objects.

Following Mr. Jones, Pres. York and Dr. Miller made a few well chosen remarks on the importance of the work to be undertaken by Mr. Jones, and pledging the hearty co-operation of bee-keepers.

Mr. Jones said that 16 States now have pure food laws. He asked the bee-keepers to aid him in enforcing the laws.

Prof. E. N. Eaton, of Chicago, an analytical chemist, read the following paper:

Honey as Food.

Honey has ever been regarded one of the good things in life. To the Hebrew fathers a land flowing with milk and honey was symbolic of peace and plenty. Thus they pictured their promised land. The ancient Greeks fed their fabled gods with nectar, even to-day generally considered

synonymous with honey. Virgil wrote pastorals in its praise. The American African, always extravagant in language, can conceive of no sweeter name for his love than "My Honey." The black mamma lulls her pickaninies to sleep with the same sweet refrain.

In English-speaking nations the newly-wedded celebrate their "honeymoon." By the way, that term has a derivation not commonly known. It was a custom of the Goths to celebrate the marriage relation by drinking diluted honey, sometimes called "hydromel," for one month or one moon's age—hence the name "honeymoon." It was this drink, fermented I fear, which caused the death, thru suffocation, of the notorious vandal, "Attila."

In speaking of honey as food it will be necessary to name the three great classes of food material—the proteids (or nitrogenous foods), the carbohydrates, and the fats, both of the latter being carbonaceous foods. The nitrogenous foods are, in the main, flesh formers, while the carbohydrates and fats are fuel foods. Honey belongs to the sugar group, a large division of the carbohydrate family. All carbohydrates consist chemically of the elements carbon, hydrogen and oxygen, the latter two in the proportion to form water, that is, eight times as much oxygen as hydro-

gen. Honey consists largely of the two sugars—dextrose and levulose—in equal molecular proportions. These sugars occur in Nature in fruits and vegetables. When coffee A sugar, or damp brown sugar, stands for some time it becomes changed into these same sugars. The same change in cane-sugar is brought about by action of diluted acids, neutral salts and ferments. These sugars, when obtained from cane or white sugar by any agency, are invariably formed in equal quantities, and when so existing are termed invert-sugar. Levulose is sweeter, and dextrose not nearly as sweet, as cane-sugar. Invert-sugar is perhaps a trifle less sweet than cane-sugar.

Cane-sugar is usually present in honey, and may exist in considerable quantity in unripened honey, or in the product obtained by feeding bees with that sugar.

Dextrin also occurs in honey in small and variable quantity. It belongs to the carbohydrates group, but is not a sugar. It forms an intermediate product between the sugars and the starches. Dextrin is more commonly known under the name of "British gum," and constitutes the adhesive on postage stamps. It also occurs in the crust on bread.

Formic acid is a constant component of honey. This acid is said to be the irritating agent in the sting of bees and other belligerent insects. Formic acid, like its relative, formic aldehyde, is an excellent antiseptic, but the statement that it exists in sufficient quantity in honey to act as a preservative or intestinal antiseptic, should be taken with a grain of allowance—perhaps two grains.

It will not do to leave the subject of the composition of honey without referring to the least prominent constituent from the standpoint of the scales, but the most important from the standpoint of the purse—the flavors carried from the flowers furnishing nectar. These flowers give to different honeys their individuality. They also add to its value as a delicacy. A solution of sugars without them, even in the proportion existing in honey, could no more justly be sold as honey than could a mixture of acetic acid and water be sold for cider vinegar, or a concoction of water and alcohol for wine. It therefore follows that invert-sugar, or any syrup obtained by artificial feeding, is not honey, and when sold as such is as much a violation of the moral law as selling "white-clover glucose."

In studying the food value of honey from the standpoint of nutrition, we may disregard the flavor and minor constituents, and consider the relations of the main constituent—invert-sugar—in the upbuilding of the animal organism. In the absence of any proof we must give levulose the same value as dextrose as a food, and there seems little doubt that the two sugars follow the same course to the blood.

Sugars are not found in abundance in the body. The blood contains a little dextrose, and the muscles inosite. The liver is stored with glycogen, an isomer of starch, but unquestionably derived from sugar. The generally accepted theory of sugar digestion and assimilation is that sucrose and starch are changed into dextrose by ptyalin and pancreatic ferments. The dextrose and levulose are carried to the liver and converted into glycogen. The glycogen is held in reserve to be reconverted into dextrose to replenish the blood when depleted in that constituent. By this means the circulating sugar is kept constant in quantity.

The food value of sugar has been underestimated in the past. Children are even to-day discouraged from eating candy, which their system craves, and are usually obliged to content themselves with penny goods and other cheap and inferior sweets. And this in the face of the fact that Nature has given her most emphatic approval of sugar as food by placing it in almost all animal secretions for the young. It occurs in predominant quantity in the milk of all mammalia; in human kind, constituting over one-half of the entire solids, and double the amount of any other constituent.

The sugars are the most available of the heat and energy producers. Recent investigations in Germany, France and Italy have shown that sugar acts as an immediate invigorator when fed to persons in extreme fatigue. People at extremely hard work immediately feel the recuperating effect of a sugar diet. The governments of Germany and the United States have added sugar to the rations of their soldiers. In this country the sugar is supplied in the shape of candy. Candies usually consist of mixtures of sucrose, dextrose and dextrin. There can be little doubt that if honey were substituted in part for candy in the soldier's dietary, even more favorable results would be obtained, because, first, honey is in a sense a predigested sugar, and the demand on the digestive forces is lessened; second, honey consists of almost pure invert-sugar, while candies contain dextrin of unknown food value, but certainly not as immediately available as sugar; third, honey is produced by bees unskilled in the art of sophistication, and above the practice of artificially flavoring and coloring, while candy is a product of human ingenuity, and may contain unwholesome constituents; candy usually contains glucose, a product not above suspicion; honey is made in Nature's laboratory; and, fourth, honey can more easily be used as Nature intended, and as experience has proven best—that is, in connection with other foods, as upon bread or hardtack. Candies, when eaten in excess, are unwholesome and cloy upon the palate.

In favor of candy it may be said that adulteration is becoming less and less prevalent, and in the higher-priced candies deleterious adulteration is almost unknown. This is largely due to the wisely directed efforts of the National Confectioners' Association.

Again, candy has an obvious advantage over honey in ease of transportation and distribution. Candy is possibly a trifle cheaper than honey in this country, but certainly not a luxury in the Philippines.

It is an interesting fact that the consumption of no other commodity, unless it be soap, so accurately measures the civilization of peoples as sugar, judged, of course, by our own standards. Great Britain consumes more sugar per capita than any other nation; next comes the United States, then in order follow Switzerland, Denmark, Sweden and Norway, Holland, France, Germany, Austria, Russia, Turkey and Italy. Some allowance must be made for Sweden and Norway, whose cold climate predisposes them to the use of the more concentrated fuels—the oils and fats.

I wish to say one word, in closing, for the dignity of the bee as a manufacturer rather than a collector or common carrier. It is indeed true that the bee may invade the sanctity of more than a million flowers to produce one pound of honey, but she has not gathered honey, only the raw material, which, by working over, she manufactures into honey. She then puts it up in her unique and inimitable original package, and marks each cell with her seal.

E. N. EATON.

The Association tendered Prof. Eaton a vote of thanks for his excellent and instructive paper.

After supper the convention continued their labors. Some hilarity was also interspersed.

The following resolution was read and unanimously adopted, recommending Prof. E. N. Eaton for the position of State analyst:

"Resolved, That we congratulate the consumers of the State of Illinois upon the enactment of pure-food laws, and the appointment of a pure-food commissioner. We urge upon Commissioner Jones the necessity of securing honest, energetic and capable assistants to aid in carrying on the work."

"We would endorse Prof. E. N. Eaton for State Analyst, knowing his ability to properly carry out that branch of the work."

The question-box was then taken up. One question, "How to Increase the Attendance," was considered at length. As our first evening session was such a big suc-

cess, it was considered best to hold the next meeting in the afternoon and evening, beginning at 1:30 p.m. and continuing until the members are tired. It was suggested that a lunch be served at 5 p.m., so as to "let no guilty man escape."

The convention adjourned to meet at 1:30 p.m., April 5, 1900.

HERMAN F. MOORE, Sec.



CONDUCTED BY

DR. C. C. MILLER, Marengo, Ill.

(The Questions may be mailed to the Bee Journal office, or to Dr. Miller direct, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.)

Looking for a Text-Book on Bees.

I saw in a recent answer to a question you refer to a text-book. Kindly tell me what book it is, and where I can get it.

CANADA.

ANSWER.—You are on the right track when you inquire after a text-book. No bee-keeper should be without one. It is even more important than to have a bee-paper, and that's putting it very strong. There are several excellent text-books, any or all of which are good. By sending to the office of the American Bee Journal you can obtain, postpaid, any of the books mentioned on page 15, at the prices named.

Bee-Keeping as a Rural Pursuit.

Here are two sentences taken from Farmers' Bulletin No. 59, of the U. S. Department of Agriculture, which I want explained thru the columns of the American Bee Journal. The sentences read as follows:

1. "On the whole, there should be expected from the raising of bees for any purpose whatever, only fair pay for one's time, good interest on the money invested, and a sufficient margin to cover contingencies."

2. "With no greater expectations than this from it, and where intelligence directs the work, apiculture will be found, in the long run, to rank among the best and safest of rural industries."

Does the second sentence mean that bee-keeping is better, or safer, than all other rural industries? Or, does it mean that it is placed on an equality with other good rural industries, viz: Stock-raising, dairying, poultry-raising, etc?

In explaining the foregoing, I want only the sentences explained as they read, and not as to your opinion whether bee-keeping is better or equal to the others named.

KANSAS.

ANSWER.—Taking the sentences as they read, they seem to mean that when the whole line of rural industries is considered, bee-keeping will be found one of the safest from risks, and among those yielding the largest pay for capital and labor.

Granulated Honey—Feeding Bees—Fertilization in Confinement—Foul Brood.

Altho not a beginner in bee-keeping, there is much in this trying year where I am at a loss to know what to do. Southern California was unfortunately visited by two successive dry years (1898-99), with insufficient winter rains and dry, hot winds, and in consequence the farmers and bee-keepers have a hard time of it. This season was, so to speak, a total failure.

My apiary is situated in a sheltered nook at the base of San Jacinto Mountain. I bought 80 colonies last spring, of which I work 70 for extracted honey.

1. The early part of this season my bees did fairly well on alfalfaree clover and fruit-tree bloom, from the adjoining fruit colony, but the first honey, altho it was by no means

too ripe when I extracted, would candy or granulate within a day or two in the tank. What was the probable cause? I never have noticed this occurring with the early honey for years. It is very annoying and laborious to have to spade the honey out of the tank and dissolve it by heat or the solar extractor, in order to fill it in tin cans for market. I presume the extreme dryness of vegetation is the immediate cause. How would you remedy it?

2. Please illustrate the safest and cheapest method of feeding needy colonies without exciting robbing or drowning?

3. Do you think fertilization of queens in confinement is a possibility to produce a certain variety of bees? Or, is it best to import a tested queen?

4. Foul brood has done its ravages in Southern California apiaries. A treatise on this subject, and remedy, if there is any except extermination, would be welcome.

I think that 60 colonies of mine are safe to winter thru, and we all hope, with sufficient winter rains, that next spring will refund us for our severe losses. CALIF.

ANSWERS.—1. There is a great difference in the granulating of honey from different plants. Some kinds yield honey that will continue liquid a year or years; the honey from most plants will granulate in the course of the following winter; while some kinds will begin to granulate a few days after being gathered. I don't know the reason for it, and never heard of any reason. Neither do I know of any remedy.

2. I know of no safer nor more satisfactory method than to use the Miller feeder. The feeder is put on the hive the same as a super, and putting on the one will no sooner start robbing than putting on the other. When your feeders are all on and left uncovered, you can go around and put in each the amount of dry sugar you desire up to 15 pounds, and the dry granulated sugar will no more start robbing than so much sand. Then you can go around and pour on cold water without danger of robbing and cover up the feeders. After the sugar has been dissolved by the water, then the robbers will get in their work if the feeder is not carefully covered.

A cheaper way is by the crock-and-plate plan. Take a common stone crock (a gallon crock is a good size), fill it $\frac{3}{4}$ full of sugar, or less, as you desire. Put in as many pints or pounds of water as of sugar, cover the crock with a single thickness of flannel or woolen cloth, or with 5 or 6 thicknesses of cheese-cloth; lay over this a dinner-plate upside down, put one hand under the crock and one over the plate, quickly turn the whole thing upside down, and place over the frames of the hive with an empty hive-body about it, and covered up so no robbers can get in from outside. With either of these plans the feeding must be done before cold weather; better not later than September. If you are so unfortunate as to need to feed in winter, and have no combs of honey, lay cakes of candy over the frames, and cover up warm.

3. I have no faith in fertilization in confinement. At different times in the past there were reports of success, but the reports lack confirmation in the way of having the thing repeated in the same way afterward. Get a good queen to start with, and run your chances of pure fertilization, altho it would be better to have one choice queen for drones and another from which to rear queens.

4. Such a treatise is already on the market in Dr. Howard's pamphlet on foul brood, which can be had from the office of the American Bee Journal for 25 cents.

Apartment and Department—Alfalfa.

1. How do you tell the two different apartments—the brood apartment and the surplus apartment?

2. Does alfalfa bloom make good honey? CALIF.

ANSWERS.—1. It is not strange that there should be some uncertainty as to the proper meaning of the word "apartment" as used in bee-culture. In the first place the words "apartment" and "department" are not infrequently confused. An apartment is a separate room or place, usually separated by some sort of a partition from other apartments. A department is something separate as to character rather than place; as the dry goods department and the grocery department of a country store, or of a department store. The two departments may be in one apartment, and one department may fill several apartments. Everything pertaining to the brood in any way may be said to belong to the brood department, no matter in what part of the hive it is; and what pertains to the sur-

plus may be said to belong to the surplus department, no matter in what apartment it may be.

The word "apartment" is the one most commonly used in bee-keeping, and it is not easy to keep it exactly straight. There is generally no difficulty in distinguishing a pig-pen from a bed-chamber, but in an Irishman's shanty with the pig sleeping under the bed (as reported) the distinction is not so clear. So the brood apartment may be sharply separate from the surplus apartment; as in the case of a box-hive with glass boxes for surplus on top, in which case the top of the hive separates the brood apartment below from the surplus apartment above. Or, there may be no such thing as two separate apartments, the brood and the surplus being all in the same apartment; as was the case with the old-fashioned straw-skeps, or even a box-hive with no surplus boxes on top.

The general rule is that the lower story is the brood apartment, everything above constituting the surplus apartment. There may be little or no real partition between the two apartments, just as in the case of two rooms in a house with large folding-doors or portieres between, there can scarcely be said to be a partition, still the apartments are considered separate.

2. In many parts of the West, as Utah, Colorado, etc., alfalfa is one of the best honey-plants. In the East reports seem to give it no standing whatever as a honey-plant. In at least some parts of California its reputation is good. Wherever it does yield honey, the character of the honey is excellent, with many being considered as having no equal.

Preparing Bees for Moving.

I have 48 colonies of bees that I have to move not later than March 1. They are in a cellar, bottom-boards off, covers sealed down. How can I best succeed in moving them about 7 miles? How ventilate, and how fasten the bottoms on?

Would a strip nailed on each corner of the hives, and also nailed into the edge of the bottom-board, be a good way? I have thought so—what do you say to that?

IOWA.

ANSWER.—The first thing is to let the bees have a flight after being taken from the cellar before any attempt at moving them. To take them directly from the cellar to their new place would be somewhat disastrous, in all probability. The weather is usually so cool on the first of March that very little ventilation is needed. Wirecloth at the regular entrance will be sufficient. The particular way of fastening it on depends upon the kind of hive and entrance you have. One way lately given in *Gleanings in Bee-Culture* is probably as easy as any: Cut a piece of wirecloth as long as the entrance is wide, and two or three times as wide as the entrance is deep. Bend it V-shape the entire length; push the sharp end of the V into the entrance and drive in a nail near each end to prevent the wirecloth from springing out again.

Your plan of fastening the bottoms to the hives will be all right. You may like better to use staples. What are called tobacco-staples are all right—a staple about $1\frac{1}{2}$ inches wide with legs $\frac{3}{4}$ inch long. Drive one leg of a staple into the hive and the other into the bottom-board.

Sweet Clover in Canada.

When is the best time to sow sweet or white clover, and the kind of soil best suited to it? Also, will sweet clover suit this northern climate? There is none here. ONT.

ANSWER.—Any time from fall to spring will do. So long as you didn't sow it in the fall, wait till the ground is open in the spring, then roll it into compact soil. One of the best ways is to let stock tread in sweet clover seed. Any soil will do, especially poor lime soil. Sweet clover does well in Canada.

"The Hum of the Bees in the Apple-Tree Bloom" is the name of the new bee-keeper's song—words by Hon. Eugene Secor and music by Dr. C. C. Miller. This is thought by some to be the best bee-song yet written by Mr. Secor and Dr. Miller. It is, indeed, a "hummer." We can furnish a single copy of it postpaid, for 10 cents, or 3 copies for 25 cents. Or, we will mail a half-dozen copies of it for sending us one new yearly subscription to the American Bee Journal at \$1.00.



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NOTE.—The American Bee Journal adopts the Orthography of the following Rule, recommended by the joint action of the American Philological Association and the Philological Society of England:—Change "ed" or "ed" final to "t" when so pronounced, except when the "e" affects a preceding sound. Also some other changes are used.

Careless Correspondents.—Dec. 30 we received a one-dollar bill for renewing subscription, with a sheet of note-paper in an envelope, but no name or address given so we could tell who sent it. The postmark on the envelope was "Treadwell, N. Y." We can hardly understand how any one could be so careless. It is very annoying to us to receive such letters, and no doubt is the cause of much loss to the careless people who make such mistakes.

Everybody who pretends to do any business whatever should have at least a rubber stamp with their correct name and address on it, and then with it stamp at the top of every sheet of paper they use. This would help out all right when they are so forgetful as to write a letter and then not sign it.

"The Coal-Tar Products."—Mr. Thos. Wm. Cowan, editor of the British Bee Journal, but now in California, wrote us as follows, Dec. 26, 1899:

On page 786 (1899), Prof. Cook writes under the above heading, and from what I can gather he thinks naphthalene would act more surely in destroying foul-brood germs if given to bees in their food.

Allow me to caution bee-keepers in doing so, as otherwise the result may be as disastrous as they have been where the error has been made in giving naphthalene in place of naphthol beta.

Naphthalene, when placed in a hive, does not destroy the germs, but, until it has evaporated, prevents the devel-

opment and growth of bacteria. The constant presence of naphthalene in a hive tends to prevent the disease from gaining ground. Of course, too much in a hive is obnoxious to bees, and they leave it, and in some cases brood has been found damaged. That is why the amount recommended does not exceed two balls at one time in a hive.

For giving in food, naphthol beta (usually written "Naphthol B.," to distinguish it from the Naphthol A. series) only is used. I do not know what naphthol beta is, or what its effect on bees would be. Naphthol beta, in the dilution generally used, does not destroy the spores or bacillus of foul brood, and its efficacy depends upon its preventing the spores from germinating or killing the bacilli, when the spores have turned into these. This is the reason why it is recommended to have it always in the food given to bees. There is no known chemical substance that could be given in sufficient strength to kill the spores but what would also destroy the bees.

THOS. WM. COWAN.
Monterey Co., Calif.

The United States Bee-Keepers' Association.—General Manager Secor's annual report for 1899 was received at this office the last week in December, and reads as follows:

REPORT OF THE GENERAL MANAGER FOR 1899.

To the Members of United States Bee-Keepers' Association:

The chief work of the Association during the year 1899 has been the attempt to stop the sale of adulterated extracted honey.

The place chosen to begin operations was Chicago. This was agreed on because it was thought that the laws of Illinois were explicit enough and severe enough to warrant an attempt to enforce them in the interest of pure food.

Attorney Herman F. Moore, a bee-keeper and member of this Association, assisted by George W. York, editor and publisher of the American Bee Journal, proceeded to collect samples of so-called extracted honey with the intention of prosecuting the offenders, if on analysis they should prove to be adulterated. Nine samples were selected out of a dozen or more bought at different groceries. Out of the nine, five were selected, and a complete analysis made for use in court. That some of them were adulterated was clearly proved by the chemical analysis.

Suit was brought in Justice court against one of the retail grocers where one of the jars was bought, which on trial was proved to contain 90 percent glucose. Notwithstanding that fact, and notwithstanding the law and evidence were clearly on the side of the prosecution, the Justice discharged the prisoner. It was a surprise to everybody connected with the case, except possibly to the judge and lawyer for the defence.

Altho the bee-keepers lost the case in court, the trial elicited so much interest, and was so widely advertised in the daily papers, the result was that one of the leading wholesale grocery houses (and the one, by the way, where the very bogus honey in court was obtained) put out the following circular to the trade:

"PURE FOODS.—We believe the tendency of the buying public in the future will be in the direction of strictly pure foods; and in our opinion the result of this will undoubtedly prove highly beneficial to the health of the consuming public, and unquestionably more satisfactory to the jobber, retailer, and everybody concerned in selling this quality of goods.

"Adulterated articles in the food line are still on the market..... but we believe it will be to the best interests of all concerned to advocate the purchase of pure foods as speedily as possible. Unless you know it to be a positive fact that the article you are selling is absolutely pure, do not sell it as such. If you are in doubt, make it known that way."

The above circular was dated and sent out the day of final trial. It looked very much as if the notoriety which Chicago houses were getting thru the papers awakened them to the need of doing something to hold their trade.

Therefore, altho the first drawn battle in the interest of pure extracted honey was an apparent defeat, it seems to have aroused public opinion sufficiently to do good.

No further prosecutions were ordered against the sellers of the other adulterated samples gathered, partly for the reason that not sufficient funds were left in the treasury to continue the fight; and for the further reason that Illinois will soon have a Pure Food Commissioner who, it is to be hoped, will assist, if not take the lead, in the enforcement of the pure food laws, including adulterated honey.

It is the duty of the States Attorney to prosecute for the people all violators of the criminal code, but unless some one stands at his back and insists, and assists, he evidently does very little. We found it was necessary to

help prepare the papers and to produce numerous witnesses. Mr. Moore and Mr. York spent a good deal of time, and did faithful and valuable work for the Association, the latter without any compensation whatever.

I have written 95 letters on a variety of subjects pertaining to the work of the Association, besides the receipts for membership fees. Among these have been articles for the press, trying to correct erroneous impressions regarding the manufacture of comb honey; letters in the interest of pure-food legislation; advice to bee-keepers who were likely to suffer by the untimely spraying of orchards; advice to other bee-keepers who had been ordered to remove their bees from town, or from the proximity of fruit-farms; legal advice regarding the ownership of absconding swarms; the settlement of disputed accounts, bad debts, etc. None of these matters have required legal procedure or defense at the expense of the Association. It has been the aim of the General Manager to avoid litigation whenever possible to effect an honorable settlement.

It seems our Canadian brethren have the same troubles that we of the States do. G. A. Deadman, of Ontario, was annoyed by a quarrelsome neighbor who brought suit to compel him to move his bees. On my advice he employed an able attorney and resisted the suit, promising to write me if anything unusual developed. As I heard nothing from him I infer that his touchy neighbor has not succeeded in getting the court to declare bees a nuisance. With my letter of advice in this case, I sent him a copy of the decision in the celebrated "Arkadelphia case," which Mr. Newman defended and won with such signal ability.

At the annual meeting of the United States Bee-keepers' Association held at Philadelphia last September, Mr. Newman, General Manager of the National Bee-keepers' Union, and Dr. Mason, representing our society, submitted a new constitution to be voted on by both societies with a view to unite the two if the members of both societies so vote. There will be mailed, therefore, with this report the new constitution to be voted upon by all persons who are eligible to vote. It is to be hoped that the project so favorably started may be carried thru, thus uniting all the bee-keepers in one strong organization.

Mr. Newman has exercised a large influence in building up an organization of bee-keepers, and has done much valuable service in their behalf. The relations between him and the writer hereof have been most pleasant. The appreciation for his good work can not be too cordially expressed.

The financial statement herewith submitted shows a small balance in the treasury, but if we carry forward the work which we are expected to do another year toward enforcing the laws against the adulteration of honey, it is needful that all bee-keepers cast in their mite to aid in the good work.

Fraternally yours,
EUGENE SECOR, *General Manager.*

The new constitution referred to by Mr. Secor was published on page 707 of this journal for 1899.

The treasurer's statement shows a balance in the treasury of \$131.22.

The present list of members, the names of whom accompanied the annual report, shows 400. There ought to be at least five times that number. Why can't there be? Surely, bee-keepers cannot expect their national organization to do much for them and their industry when they give it so small support. With a membership of 2,000, and the consequent enlarged treasury fund, there is no telling what good things might be accomplished. We wish the officers might have the opportunity to show what they could do with ample funds and large membership.

Lace-Paper Edgings for Sections of honey are much used in England. Any imperfections about the outer part of the comb are thus hidden from view. The British Bee Journal, in order to show to what extent this matter is carried, gives a fine picture of a section bought in a store out of a large lot similarly gotten up. The actual surface left uncovered by the paper is $2\frac{1}{4}$ inches square; that is, the purchaser is able to see a little more than one-fourth of the surface. No wonder the British Bee Journal calls a halt.

The Premiums offered on page 27 are well worth working for. Look at them.

Your Bee-Keeping Experiences Wanted.—We are always glad to publish the good things that our subscribers send in, drawn from their actual work with the bees. Many a little short cut or kink that you use would help some other bee-keeper if you would write it out and send it in for your bee-paper to publish.

We do not ask this as would a beggar, but simply suggest that as you have been helped by the writings and experiences of others, it is no more than fair that you should contribute your share as a slight token of your appreciation of the aid you have received from those who have been glad to give what they could to make your efforts more successful in the apiary.

Taking Care of Things.—Somnambulist, of the Progressive Bee-Keeper, has had his dreams disturbed by the reckless way in which some bee-keepers let apicultural appliances go to waste. Hive-bottoms are allowed to rest immediately upon the ground; wax-extractors have the glass exposed to accident all the year round; and then he goes out of his way to shy a stone at Farmer Shiftless who allows all his farm implements to become toughened by exposure to the weather.

The Weekly Budget

MR. M. H. MENDLESON, of Ventura Co., Calif., writing us Dec. 16, said: "At present we are having a good rain, but it is the late rains that decide the season."

A NEW ORGANIZATION among the bee-keepers of South Dakota will be formed at Yankton, Jan. 25. We hope it will have the support of all the bee-keepers in that region.

"A CERTAIN CHINESE FLOWER," it is said, "is red in the sunlight and white in the moonlight." If it yields nectar, we presume it would have to be gathered by the bees at night in order to produce white honey.

MR. ALBERT GEISE, of Idaho, sends us a newspaper clipping telling of a swarm of bees that settled on a bicyclist, and when the wheeler retreated the bees located on the saddle of his wheel. They were then scooped in a box by a colored man—about a peck of bees.

MR. A. L. MCFARLANE, of Wallawalla Co., Wash., wrote us recently expressing the wish that some Western bee-supply dealer would advertise in the Bee Journal, as the freight rates from the East are very high to that State. We should think it would pay some Pacific Coast dealer to keep a standing advertisement in these columns.

MRS. THOS. S. WALLACE, of Adams Co., Ill., died with consumption Dec. 31, 1899. She was nearly 61 years of age. Mr. Wallace has been an exhibitor of bees at the Illinois State Fair the past few years, and one of our subscribers for a long time. We extend to him sincerest sympathy in his bereavement, and are glad to know that he mourns not as those who have no hope of a reunion by-and-by.

EDITOR ERNEST R. ROOT attended the annual convention of the Colorado bee-keepers, held in Denver last month. He says it was a success in every way, with an attendance of from 50 to 80. Those Colorado bee-folks know how. They generally have one of the very best State bee-keepers' meetings that can possibly be gotten up. But, then, they are always "Akin" for the best of everything, or else "Rauchfussing" around after it. Hurrah for those get-there Coloradans!

SUFFERERS

FROM LUNG OR KIDNEY

troubles can obtain valuable advice, FREE, by addressing

DR. PEIRO,
34 Central Music Hall, CHICAGO.

Write at once, stating age, sex, occupation, how troubled, post-office address, and enclose return stamp for immediate reply.

Please mention Bee Journal when writing.



EITHER THE FARMER

needs a guardian or the **Page Fence** is a success. Over 500,000 are now using it and calling for more. **PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.** Please mention Bee Journal when writing.

BEE-SUPPLIES 40-page CATALOG FREE. Goods are the BEST. Prices are right. We can save you some on freight. Enquire of us. 241f JOHN NEBEL & SON, High Hill, Mo. Please mention Bee Journal when writing.

PATENT WIRED COMB FOUNDATION

Has no Sag in Brood-Frames.

Thin Flat-Bottom Foundation Has no Fishbone in the Surplus Honey.

Being the cleanest is usually work the quickest of any foundation made.

J. A. VAN DEUSEN,

Sole Manufacturer,

Sprout Brook, Montgomery Co., N. Y.

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We are distributors for **ROOT'S GOODS** AT THEIR PRICES for southern Ohio, Indiana, Illinois, West Virginia, Kentucky, and the South.

MUTH'S SQUARE GLASS HONEY-JARS, LANGSTROTH BEE-HIVES, ETC.

Lowest Freight Rates in the country. Send for Catalog.

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Successor to C. F. MUTH & SON,

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IF YOU WANT THE

BEE-BOOK

That covers the whole Apicultural Field more completely than any other publication, send \$1.25 to Prof. A. J. Cook, Claremont, Calif., for his

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Liberal Discounts to the Trade.

The Mississippi Valley Democrat

—AND—

Journal of Agriculture,

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A wide-awake, practical Western paper for wide-awake, practical Western farmers, stock-raisers, poultry people and fruit-growers, to learn the science of breeding, feeding and management. Special departments for horses, cattle, hogs, sheep, poultry and dairy. No farmer can afford to do without it.

It stands for American farmers and producers. It is the leading exponent of agriculture as a business, and at the same time the champion of the Agricultural States and the producer in politics. Subscription, One Dollar a Year.

Write for Sample Copy

Please mention Bee Journal when writing.



Celluloid for Quilts and Excluders is used in England. For quilts, celluloid has the advantage (whatever that may be) that one can lift the cover and look down upon the bees without taking off the quilt, as the celluloid is almost as transparent as glass.

Necessity of Covering Apiaries in Cuba is the heading of an article in the American Bee-Keeper, by Col. G. Garcia Viets. Before the war he had 500 colonies in one apiary and 1,200 in another, and he felt that a roof was an actual necessity. He is again building up his apiaries destroyed by war, having 200 colonies under roof and as many more under available shade. He can examine those under roof in two or three days, while it requires more than a week to look over those out-of-doors. The heat of the sun melts foundation in an hour in exposed hives, but it will not do to keep hives in groves on account of malaria. After the very heavy rains of several days, the bee-keeper cannot work at hives without roof for several days on account of mud. The roof must be strong to withstand the fierce winds.

Disposition of Combs with a Little Honey.—In the report of the Brant County convention reported in Canadian Bee Journal, appears the following:

"What would you do with combs having small quantities of honey in them in the fall? was the next question. Some members advocated setting them out in the yard and allowing the bees to clean them out. Mr. Pepper said that he preferred to extract them even though the work seemed tedious and unprofitable; leaving honey around the yard has a tendency to excite the bees and often leads to no end of trouble by their robbing. Mr. Edmonson said that he did not favor the idea, for the same reasons, and, besides, they tear and destroy the combs. Mr. S. T. Pettit's plan of placing the super of each hive in front of the colony it belongs to, in order to clean out the combs, after the last extraction, was dwelt upon; some could not see how this would be practical in a yard of 70 or 80 colonies, as it would take some time to do the extracting, and all could not be placed at the same time. J. H. Shaver and W. J. Craig observed that the moth will not attack combs left moist with honey, as they are after extracting; so readily as they will dry combs. The combs will keep better, are not nearly so easily broken, and, besides, the bees will take to them more readily when placed in the hive next season."

Black Bees and Foul Brood.

Editor Simmins makes this statement:

"Native bees are decidedly more subject to the disease of foul brood than either Carniolans or Italians; while the latter more readily respond to treatment when affected, and will quite frequently dispose of the malady without aid from the owner."

He quotes W. Symes, from the Australian Bee-Bulletin, as saying that in his earlier experience he kept black bees and was almost in despair with foul brood, but since keeping Italians the disease had gradually disappeared and now ceased to trouble him. In an experience of 25 years, Editor Simmins has had plenty of proof come under his own observation. He says:

"Our first terrible experience with foul brood occurred over 20 years ago. The bees attacked were, with two or three exceptions, so-called black bees, and these could not keep the disease under. The Italians soon disposed of it with a little assistance, and upon removal of the queen, every vestige of the complaint disappeared from the combs. On later occasions, in buying black bees from a distance, the disease has come

Yellow Sweet Clover Seed

WE HAVE IT AT LAST!

We have finally succeeded in getting a SMALL quantity of the seed of the YELLOW variety of sweet clover. This kind blooms from two to four weeks earlier than the common or white variety of sweet clover. It also grows much shorter, only about two feet in height. It is as much visited by the bees as the white, and usually comes into bloom ahead of white clover and basswood. We offer the seed as a premium

A QUARTER POUND FOR SENDING ONE NEW SUBSCRIPTION.

So long as it lasts, we will mail a quarter pound of the seed to a regular paid-up subscriber who sends us ONE NEW subscriber for the American Bee Journal one year, with \$1.00.

We have been trying for years to secure this seed, and finally succeeded in getting it. It is new seed, gathered last season by an old personal friend of ours, so we know it is all right. But we have only a small supply. When nearly out we will mention it.

GEORGE W. YORK & CO.

118 Michigan Street,

CHICAGO, ILL.

BEE-SUPPLIES!

Root's Goods at Root's Prices!

POUDER'S HONEY-JARS and everything used by bee-keepers. Prompt Service—low freight rate. Catalog free. **WALTER S. POUDER,** 512 Mass. Ave., INDIANAPOLIS, IND.



HATCH with the perfect, self-regulating, lowest priced first class hatchery—the **EXCELSIOR Incubator**

Hatches the largest per cent. of fertile eggs at the lowest cost.

GEO. H. STAHL, Quincy, Ill.

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Please mention the Bee Journal.

FREE FOR A MONTH...

If you are interested in Sheep in any way you cannot afford to be without the best Sheep Paper published in the United States.

Wool Markets and Sheep

has a hobby which is the sheep-breeder and his industry, first, foremost and all the time. Are you interested? Write to-day.

WOOL MARKETS AND SHEEP, CHICAGO, ILL.

Please mention Bee Journal when writing.

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Wood Binder

will hold one year's numbers of the **AMERICAN BEE JOURNAL** and will be sent by mail for **20 cents**. Full directions accompany each Binder. The issues of the **JOURNAL** can be inserted as soon as they are read, and preserved for reference in book form.

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ADDRESS,
GEO. W. YORK & CO.
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Root's Column

The ABC of Bee-Culture!

Revised in 1899

Three thousand sold in three months.....

67,000 copies published.....



Root's A B C—the 67th thousand! Who ever could have imagined it? But then, this is a book which requires to be known before the fact of its enormous circulation can be realized. And when once known it is a book to be prized beyond many others, for its complete, interesting and practical nature. "A cyclopedia of everything pertaining to the care of the honey-bee" in very truth; a book of fine views and photographs, almost; illustrations of all the noble machinery used in one of the largest bee-supply factories in the world. Almost every thing a bee-man wants to know is given in precise alphabetical order, while its exceptionally clear type is brought out in the true American style of excellence. If there is any book on apiculture that may be thoroly recommended, it is this of The A. I. Root Co., Medina, Ohio.—BEE-CHAT, LONDON, ENG.

For Sale by all dealers in Bee-Keepers' Supplies, or sent by us for \$1.20, or clubbed with Gleanings in Bee-Culture one year for \$1.75.

SUPPLIES

For 1900.

Before deciding what goods you will order you will do well to examine our

ADVANCE CATALOG.

This is now ready and will be mailed to any one on application to us or our dealers. There are many things in this worth your careful attention. We call your attention particularly to the

Danzenbaker Hives,
Draper Barns or Jumbo Hives,
Boardman Wax-Extractor,
(Improved)
Improved Doolittle Wax-Extractor.

Page after page filled with new illustrations.

If you want a copy, send your request at once, as it will not be mailed to any one except on application.

Mention the American Bee Journal.

THE A. I. ROOT CO.,

Watch this column next week.....

MEDINA, OHIO.

upon us again, but at no time have we had any difficulty in keeping our foreign colonies clean, while those bought were readily treated as soon as the queens were changed and the foreign varieties hatching out.

"On one occasion we bought a number of colonies from (we then found) an infected source. Half were native, the rest Italian. The former were diseased, but none of the Italians.

"In another instance we bought 8 colonies of black bees. At the time, and even for several weeks after transferring, these bees appeared quite healthy. Presently, one after the other showed evident signs of disease, and tho we gave medicated food and otherwise treated them, thus restraining the malady, there was no disposing of the scattered foul cells until the queens were superseded by Carniolans and Italians. During the whole time these were the only colonies diseased among an apiary of foreign bees many times their number."

Wiring Frames with Thread.

—It is somewhat doubtful whether anything can be better for wiring frames than the fine wire usually used, but it seems that in England some prefer thread. If thread is used without preparation, the bees tear it down. A. H. Miller gives in the British Bee Journal, his method as follows:

"I got some tailor's 'yellow twist,' then melted some beeswax in a jam-pot, leaving it upon the stove till the wax came to the boil. I then put in the twist and boiled the wax well into it, then removed and run it round a reel. I then used the wax thread upon about a dozen frames, and not one was gnawed off by the bees. The combs also stood the extractor well. In fixing foundation in frames, I use a small bradawl to make two holes at each side or end of frames on the outside; these two holes are made to run into one on the inside, so as to have the two threads quite close together at about 2 inches from the bottom-bar. I never use more than that amount of support, and never had one break down after using it with some hundreds of combs last season with the wax twist in the extractor.

"The bees seemed rather to like the wax thread, for they imbedded it so that you can scarcely see it in the combs. It is also much nicer to use than wire, besides being so simple."

Getting Queen-Cells Started.

One of the live topics of the day is the improved methods of queen-rearing, new points being brought out every now and then, showing that some little thing has made all the difference between success and failure. Editor Pender, of the Australasian Bee-keeper, says that when he gives royal jelly, it too often occurs that it dries up in a condition unfit for the larvae, and he gets better results not to use jelly. He proceeds as follows:

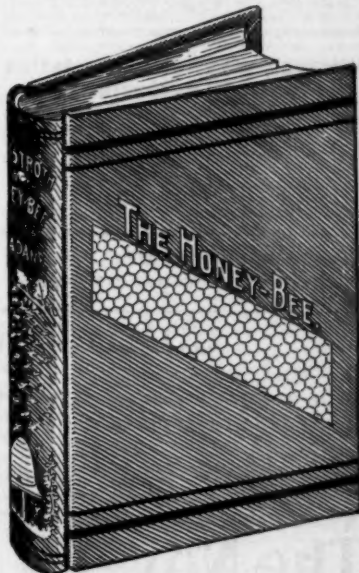
"I have a colony queenless in which there are one or more frames of young unsealed brood—the younger the better. When I arrive at the apiary in the morning, I remove these frames of brood for which the bees are busy preparing milk food, and so cause them to accumulate it in their stomachs. When leaving the hive I leave an empty space between two combs for the prepared frame; in this space the bees will cluster in large numbers. From two to four hours later, I take a frame of prepared cell-cups and transfer, as rapidly as possible, the larvae selected for queens and place this frame in the vacant space, so great is the cluster of bees that time has to be allowed for the frame to settle into position, or if the frame is forced down bees will be crushed. I now have my prepared cells immediately surrounded by bees having plenty of food prepared to feed the royal larvae, and if this frame is examined in an hour, not only do we find the larvae well fed, but the cups shaped into true queen-cups. The cups are hardly given before the bees start feeding the larvae. These larvae receive only the freshly-prepared food.

"To obtain larvae suitable for grafting, I

Langstroth on... The Honey-Bee

Revised by Dadant—1899 Edition.

This is one of the standard books on bee-culture, and ought to be in the library of every bee-keeper. It is bound substantially in cloth, and contains over 500 pages, being revised by those large, practical bee-keepers, so well-known to all the readers of the Ameri-



can Bee Journal—Chas. Dadant & Son. Each subject is clearly and thoroly explained, so that by following the instructions of this book one cannot fail to be wonderfully helped on the way to success with bees.

The book we mail for \$1.25, or club it with the American Bee Journal for one year—both for \$1.75; or, we will mail it as a premium for sending us THREE NEW subscribers to the Bee Journal for one year, with \$3.00.

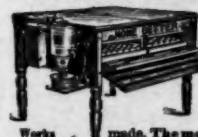
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AN APIARY, large or small, on shares, or to buy on payments. Michigan preferred. W. S. FRAZER, 1705 Rembrandt St., INDIANAPOLIS, IND.



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Works made. The most honestly constructed. Perfectly built to last. Lowest priced good machine on the market. Send 2c. stamp for catalogue. "None Better" Incubator Co., Box A, Newton, Ia. Please mention Bee Journal when writing.

We call your attention to our **PACKING-CASE** IT PROTECTS GOODS.

Insures Arrival of Supplies in Neat Condition.....

By the use of this light, strong, and tightly-woven packing-case we are able to place our goods into your hands in just as good condition as when they left our factory, free from dirt and damage ordinarily resulting from railroad handling.



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—made by a new sheeting process of my own, which produces a clear, transparent and pliable foundation, that retains the smell and color of wax.

Working Wax into Foundation for Cash a Specialty.

I also carry a full line of SUPPLIES, and can furnish anything in any quantity at bottom prices—wholesale and retail. 1900 Catalog will be ready soon. Send me your name and let me know your wants.

GUS. DITTMER, Augusta, Wis.
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We have all the latest improvements, are sold at very low prices and guaranteed to please every customer. Send 6 cents for our 150 page catalogue, which contains full descriptions of our extensive line and tells how to raise poultry successfully. Plans for poultry and brooder houses.

Des Moines Incubator Co., Box 78, Des Moines, Ia.

ELECTRIC FEED MILL

We have put out this mill to meet the demand of the patrons of the famous Electric Goods for a good mill at a fair price, it is a clean grinder and absorbs or wastes no power in useless and expensive gearings. Cuts, crushes and grinds ear corn, and all small grains and is or may be run by hand, or by electricity.

No. 44 Adjustable—grinds coarse or fine, prices from.....**ELECTRIC GOODS CO.**
Pho: 1700. Chicago and New York, N.Y.

keep my breeder-queen well supplied with bees and with but few larvae, so that they are abundantly fed. If you look into your hives you will always find that colony having but little unsealed brood, has the larvae for the first few days floating in an extra abundance of white milk food, which is the royal jelly of the queen, and, when transferring, the larvae are floated upon the transfer-stick without touching them, and sufficient of the jelly transferred with them to surround them in their new cradle. If the cups, as now work on by the bees, are placed in an upper story of a strong colony, having frames of unsealed brood, a queen-excluder over the brood-chamber, and an old queen laying below, the cells will be completed by the bees, and good cells will be the result if not more than a dozen be given at one time. When removing this frame of cells from the queenless colony, take what bees are hanging to the frame, and a second frame of prepared cups can be given the queenless bees, and I should say it was far more certain to have the cells started by queenless bees than placing the prepared cups at once in the super over the queen-excluder, at least I have found it so, as my bees always refused to accept the cups unless work on by the queenless bees. If a large number of queen-cells are required, the queenless bees will start several prepared lots in one day."



A Fair Yield of Honey.

The past season was not a very good one here. The honey crop was generally light in quantity, but not in quality. I had a fair yield—nearly 1,500 pounds from 40 colonies, mostly buckwheat honey. I think that nearly all the bees in this part of the country went into winter quarters with an abundance of good buckwheat honey, which I consider is the very best for outdoor wintering.

ED. JOLLEY.
Venango Co., Pa., Dec. 14, 1899.

Bees Did No Good.

My bees have done no good this season, but I enjoy the Bee Journal and hope for better success next year. I bought some golden Italian bees and have sown some sweet clover seed. My bees are in good condition for winter, as they loaded up pretty well on goldenrod and wild aster.

WILL C. GRUBER.
Martin Co., Ind., Dec. 25, 1899.

Total Failure—No Clover Honey.

Bees were a total failure here the past season. There was no clover. Where there was basswood they did fairly well; it lasted about 12 days.

D. E. WHITING.
Dodge Co., Minn., Dec. 23, 1899.

A Young Beginner's Experience.

I commenced keeping bees for a man that I work for, but he never read about bees, and wouldn't let me manage them the way others' experience had taught me, so we didn't have much success. I bought him out last spring—five colonies for \$30. They increased to 13 colonies, and I got 50 or 60 pounds of honey from three. It was a very poor season for bees here—too dry. I was away two weeks in September, and the moth-millers got into one colony and destroyed about half of the combs, so they became discouraged and went away. I now have 11 colonies packed with wheat straw and chaff.

I have always been very much interested in bees, and since I have taken the American Bee Journal I like the business better than ever. I get so much information out

COMB FOUNDATION,

WHOLESALE AND RETAIL.

If you are a dealer, and expect to use much of this article the coming year, or can sell some, you will save money by getting our prices. 1-pound square Honey-Jars, \$4.70 gross. Full line of popular SUPPLIES. Catalog free.

L. J. STRINGHAM, 105 Park Place, New York, N. Y.

Please mention Bee Journal when writing.

The Novelty Pocket-Knife

(A heavier and stronger knife than the one we offered heretofore.)



(THIS CUT IS THE FULL SIZE OF THE KNIFE.)

Your Name on the Knife.—When ordering, be sure to say just what name and address you wish put on the Knife.

The Novelty Knife is indeed a novelty. The novelty lies in the handle. It is made beautifully of indestructible celluloid, which is as transparent as glass. Underneath the celluloid, on one side of the handle is placed the name and residence of the Subscriber.

The Material entering into this celebrated knife is of the very best quality; the blades are hand-forged out of the very finest English razor-steel, and we warrant every blade. The bolsters are made of German silver, and will never rust or corrode. The rivets are hardened German silver wire; the linings are plate brass; the back springs of Sheffield spring-steel, and the finish of the handle as described above. It will last a lifetime, with proper usage.

Why Own the Novelty Knife? In case a good knife is lost, the chances are the owner will never recover it; but if the Novelty is lost, having name and address of owner, the finder will return it; otherwise to try to destroy the name and address, would destroy the knife. If traveling, and you meet with a serious accident, and are so fortunate as to have one of the Novelties, your POCKET-KNIFE will serve as an identifier; and in case of death, your relatives will at once be apprised of the accident.

How appropriate this knife is for a present! What more lasting memento could a mother give to a son, a wife to a husband, a sister to a brother, or a lady to a gentleman, the knife having the name of the recipient on one side?

The accompanying cut gives a faint idea, but cannot fully convey an exact representation of this beautiful knife, as the "Novelty" must be seen to be appreciated.

How to Get this Valuable Knife.—We send it postpaid for \$1.25, or give it as a Premium to the one sending us THREE NEW SUBSCRIBERS to the Bee Journal (with \$3.00), and we will also send to each new name a copy of the Premium Edition of the book, BEES AND HONEY. We will club the Novelty Knife and the Bee Journal for one year, both for \$1.90.

GEORGE W. YORK & CO., 118 MICHIGAN STREET, CHICAGO, ILL.

of it that I wouldn't do without it under any condition.

I think this is a good location for bees. I am 19 years old, and have been farming.

I saw an article about bees working on strawberry blossoms. I don't think I ever saw any honey-bees working on these blossoms.

JACOB STINE.

Barry Co., Mich., Dec. 20, 1899.

Bees Didn't Do Well.

I put 180 colonies of bees into winter quarters—90 in a shed and 90 in the cellar. Bees did not do very well here the past summer. From 130 colonies, spring count, I got 3,000 pounds of nice section honey. The new swarms did not do anything. The bees I put in the shed last winter came out all right.

WM. J. HEALY.

Iowa Co., Wis., Dec. 19, 1899.

Half a Crop—Smoker-Drops.

We got only half a crop of honey here the past year, with large winter loss.

I would suggest to Dr. Miller (concerning smokers dripping) to use chips of soft wood, which do not contain any tar when pickt up in the spring after lying all winter on the ground. With these I have had no trouble from black drops.

L. A. SYVERUD.

Lincoln Co., S. Dak., Dec. 19, 1899.

Bees Did Fairly Well.

My bees did fairly well the past season, as they averaged about 60 pounds to the colony. They did well in fruit-bloom, but the forepart of June they were short of food, and if I had not fed them I should have lost some by starvation. Our main supply is from sweet clover, catnip and buckwheat.

M. BERT.

Lucas Co., Ohio, Dec. 18, 1899.

Looking for a Good Season.

The bees did not do any good here this year, but they are wintering well up to the present. They have plenty of honey to winter on. We are looking for a good honey season.

The American Bee Journal is certainly up to the times; I could not keep bees without it.

B. F. BEHELER.

Summers Co., W. Va., Dec. 25, 1899.

A Poor Year, But Prices Good.

I lost only one colony last winter, and that died of starvation. I started in the spring of 1899 with 54 colonies, and increased to 58. It has been quite a poor year. I obtained a trifle over 1,500 pounds of honey but prices have greatly helped to make up for the small crop.

J. L. HAIGHT.

Delaware Co., N. Y., Dec. 19, 1899.

A First Season's Report.

This has been my first season with bees, and it was a poor one. I got two colonies June 15, and lost one queen from some cause, but by June 27 I found five young queens hatching, so I made a division and saved two of them, and by so doing I increased to five colonies. But I had to feed to July 1; and then in October I had to feed again, so they would have enough to winter.

TAYLOR BISER.

Buffalo Co., Nebr., Dec. 13, 1899.

Reports from Two Apiaries.

In the apiary I had in charge for 1899, I began with 21 colonies, spring count, in fair condition, but only increased, by natural swarming, four colonies. The total number of pounds of honey taken was 1,996, mostly extracted, or a general average of 95 pounds per colony. Our season was not anything to brag of, as the clover did not do as well as I expected.

The following is the report of my own

MAULE'S Seeds

Lead all, as thousands of successful gardeners in all sections of the country can attest. If you want the finest garden you have ever had, you must plant Maule's Seeds.

Our Beautiful New

Catalogue Free

to all who apply for it. It contains everything good, old or new in vegetable, flower, and farm seeds, summer flowering bulbs, etc., etc. It has hundreds of illustrations, four colored plates, practical up-to-date cultural directions, and offers \$2,500 in cash prizes. Write for it to-day. Address

WM. HENRY MAULE, Philadelphia.

Please mention Bee Journal when writing.

SWEET CLOVER

And Several Other Clover Seeds.

We have made arrangements so that we can furnish Seed of several of the Clovers by freight or express, at the following prices, cash with the order:

	5lb	10lb	25lb	50lb
Sweet Clover (white)	60c	\$1.00	\$2.25	\$4.00
Alfalfa Clover	75c	1.40	3.25	6.25
White Clover	80c	1.40	3.00	5.00
Alfalfa Clover	60c	1.20	2.75	5.00
Crimson Clover	55c	.90	2.00	3.50

Prices subject to market changes.

Add 25 cents to your order, for cartage, if wanted by freight.

Your orders are solicited.

GEORGE W. YORK & CO.

118 Michigan Street, - CHICAGO, ILL.



INCUBATOR FREE

on trial. The New C. Von Culin is most perfect in ventilation, moisture and heat.

HATCHES EVERY HATCHABLE EGG. Money made and saved. Catalog FREE. Poultryman's Plans, 10c. Address.

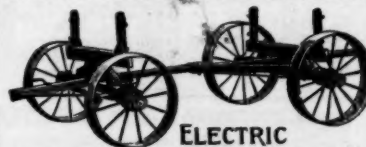
The W. T. Falconer Mfg. Co.,

Ave. 98, JAMESTOWN, N.Y.

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BUY THE BEST.

If you want the best low-down wagon you should buy the Electric Handy Wagon. It is the best because it is made of the best material; the best broad-tired Electric Wheels; best seasoned white hickory Axles; all other wood parts of the best seasoned white oak. The front and



ELECTRIC

rear hounds are made from the best angle steel, which is neater, stronger and in every way better than wood. Well painted in red and varnished. Extra length of reach and extra long standards supplied, without additional cost when requested. This wagon is guaranteed to carry 4,000 pounds anywhere. Write the Electric Wheel Co., Box 16, Quincy, Ill., for their new catalog, which fully describes this wagon, their famous Electric Wheels, and Electric Feed Cookers. Please mention the Bee Journal.

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and send our Incubators to any responsible person. No one should buy an Incubator and pay for it before giving it a trial. It is made so that nobody can fail with it. A child can run it. 10 cts. worth of oil will make a hatch. It beats all others at World's Fair, Nashville and Omaha Expositions. We are sole manufacturers of the celebrated New Premier and Simplicity Incubators. Catalogs 1 cts. Free for Poultry Houses, etc., etc. Columbia Incubator Co., 5 Adams St., Delaware City, Del. Please mention Bee Journal when writing.

bees for the season: I began with two colonies, spring count, and had no increase, but got 155 pounds of extracted honey. The cause of falling off as compared with the above report was as follows: One colony I transferred from a box-hive to a movable-frame one, and for the other I bought a new queen, and let them run down while I was waiting for the queen. Nearly half of the honey was from asters.

J. WILEY MOUNTJOY.

Anderson Co., Ky., Dec. 21, 1899.

A "Too-Too" Season for Bees.

The past season was a poor one for bees here. I got only about 300 pounds from 43 colonies. The weather was too cold, too hot, too wet, and too dry. This is the nearest I can come to explaining why. I had five colonies robbed out, and I put 40 into the cellar Dec. 14, rather light in bees and stores, but I think most of them will come out all right. The wild or bee aster (wire-weed we call it) was the salvation of the bees here the last season. It never fails to yield more or less honey every season, during September and October, wet or dry.

RUFUS WILLIAMS.

Lawrence Co., Ind., Dec. 21, 1899.

A Rather Late Swarm.

I had a fair-sized swarm of bees come to my apiary Nov. 23, and settle on a willow-tree near the ground a few feet from the hives. I got an empty hive and put in full combs of honey, leaving a couple of empty combs in the center. They march in with their queen at a lively rate, and seem in fine condition at present. My bees have been gathering pollen from some source every day up to the present writing. Brood-rearing is in progress all the time, and the hives are full of fine alfalfa honey. I have 300 colonies of hybrids.

L. E. REDDEN.

Maricopa Co., Ariz., Dec. 18, 1899.

Bees Did Fairly Well.

My bees were put into winter quarters Dec. 4. The temperature dropt then to 30 degrees above zero. Last spring was cold and backward for bees, and it took quite long for them to build up, but under the circumstances they did fairly well. I got about 1,300 pounds of honey, and I am now living in hopes for a better crop next year.

C. H. VOIGT.

Manitowoc Co., Wis., Dec. 26, 1899.

Report for the Season of 1899.

I began in the spring with 23 colonies, increased to 33, and produced 1,000 pounds of honey, which I sold at home for 10 and 12½ cents a pound.

O. B. MONTFORT.

Shelby Co., Ky., Dec. 25, 1899.

Color of Combs and Color of Honey.

I noticed in the discussions at the Philadelphia convention (page 805, 1899) Dr. A. B. Mason ask the question, "Does the color of combs have any influence on the color of honey?" I desire to make a reply to that question in the affirmative. Old combs that have had brood reared in them for any considerable length of time become about the color of dark plug tobacco, and honey, let it be ever so clear, will, after being stored in such combs, become very much discolored by actual test. But such combs are tough and make the very best of extracting-combs, if properly treated; and here is how I do it:

Lay them out in the rain, turning them over occasionally to get both sides filled. After letting them soak for awhile, lay them one at a time on a division-board, and with a quick, downward motion the water can nearly all be thrown out of the upper side, then reverse and go thru with the same motion. The water from such combs will be about the color and flavor of tobacco-juice. Keep on with this filling

and throwing out of water until the water is clear, and your honey will show no stain whatever. Of course, I have city water, and in lieu of rain I fill the combs under the hydrant, and lay them on the grass to soak. I have a great many such combs, some with considerable drone-comb in them, but that's no difference, as such combs will be filled by the bees in preference to new, white combs. I had none filled the past season, however.

Portage Co., Ohio. L. G. REED.

Not a Satisfactory Season.

The past year was not a satisfactory as last year, for bee-keeping, but we are not discouraged yet. I had 40 colonies in early spring, but only two swarms, and harvested 800 pounds of extracted honey, white clover and buckwheat. The shortness of the crop of clover was due to the severe drouth that lasted nearly two months. At the end of the month of June it began to rain at a pretty good rate, which resulted in the clover ceasing to blossom, and growing instead.

I have put into the cellar 41 colonies, with good, heavy stores. The winter is not hard so far.

I like the American Bee Journal as much as ever, and propose to subscribe for it as long as it continues to be published at the same high standard.

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Prov. of Quebec, Canada, Dec. 23, 1899.

"Taking Care" of Bees and Honey.

This has been a poor season in this locality. Some of my neighbors got hardly any honey. Bee-keeping is about 40 years behind the times in this neighborhood. No one takes any bee-literature of any kind. They say there were bees before there were books, but it did not work that way with me, for I commenced the bee-business in 1896 with one colony, and increased to eight. These were the first bees I ever handled, so that winter I lost 6 colonies. The two remaining I increased to eight, and subscribed for the Bee Journal. I now have 48 colonies in good condition. There is nothing I like to take care of so well as bees, with the exception of honey, which I can take care of at the rate of about 3 pounds a day.

NELSON S. BARBOUR,
Wadena Co., Minn., Dec. 21, 1899.

Didn't Pay Expenses.

Bees did not pay expenses this year, but are in good condition for next year. I hope to have better success with them next season.

W. BISHOP,
Otero Co., Colo., Dec. 23, 1899.

Had Hard Luck in Texas.

Some of us Texas fellows have had hard luck this year—not much honey and a great many bees dead. I have now 75 colonies in fine condition for winter, and with the rain we have had, and horsemint now up and growing, we look for a better honey-yield in 1900. Some of my neighbors who keep a few colonies of black bees have lost all they had. Of course, I can't get along without the American Bee Journal.

J. A. ROSSEN,
Ellis Co., Tex., Dec. 23, 1899.

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I was over at the old place a week ago and took a look thru some of the hives. I found that they were not as well stocked with winter stores as I could have wished. Some of them were on the point of starving. I fed them as far as I could during the limited time at my disposal.

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The past few days here have been cold and frosty, yet I have not been able to find in my rounds thru the city, one tender plant injured by the cold. Heliotropes, potato-vines and such other tender plants have escaped, as I anticipated, I presume, though we shall have a heavy frost about the last day of the year, that will get in its work on tender vegetation. Just think of great big beds of calla lilies in full bloom at this time of the year! They are as common as weeds here.

W. A. PRYAL,
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FARM RAISED POULTRY

pays the because they are strong, vigorous, healthy and will breed healthy stock. All the stock we ship is farm bred. We have the largest pure bred poultry farm in the Northwest. Our monthly poultry guide explains all and tells HOW TO MAKE BIG MONEY WITH POULTRY. Best and largest book sent. Worth \$25, but sent postpaid for 15c.

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192 pages. 8x11 inches. Articles written expressly for it by leading poultry authorities of the world. Handsomely illustrated. Justifies its title "How to Make Money with Poultry and Incubators." Tells about the

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Warranted to last ten years without repairs, and to out hatch any other machine, during three trials, bar none. 16-page circular free. Send 15c. in stamps for \$4000 Poultry Book No. 11. Address nearest office.

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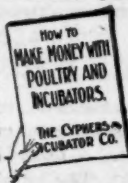
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Cost \$4000; You Get It For 15 Cents.

The Money-Makers in the poultry business, whether owning a dozen hens or a thousand, are the people who wish who of other successful poultry-keepers are doing and how they do it. It is to disseminate just such knowledge as this

that "How to Make Money with Poultry and Incubators" was published. It is admittedly the handsomest, best ever printed treatise on the poultry question. It contains nearly 200 illustrations and numerous other features which brought its cost up to more than \$4,000. While it gives complete information regarding the Cyphers Incubator it is primarily a guide and manual for the person who is considering poultry from a purely business and money-making standpoint.

Its 192 pages (8x11 inches) are filled with practical articles, written expressly for this book by leading poultry experts. For example, Geo. H. Pollard, the well-known practical poultryman, contributes three chapters on "Profitable Poultry Raising," "Winter Chickens or Runsters," and "Best Breeds for the Market." Michael K. Boyer of national reputation, has an article on "Poultry for Profit on One Acre;" Myra V. Norry tells what energetic women have done in "Women's Work with Poultry;" A. F. Hunter, the well-known editor, discusses the "Demand for Fresh Eggs and How to Meet It;" Jas. Dryden, of the Utah Experiment station, writes of "Pulle vs. Hens as Profitable Layers." These are only a few of the many special articles. In addition there are many photographic illustrations and descriptions of the largest and most successful poultry farms in the world; also numerous copyrighted plans and specifications for laying and brooding houses, together with letters from over 250 successful poultry keepers reporting their experience with the Cyphers Incubators. Sent to any address for 15c. postage. Ask for Book No. 59. Address nearest office, The Cyphers Incubator Co., Chicago, Ill., Wayland, N. Y., Boston, Mass.



Please mention Bee Journal when writing advertisers.

N. E. Ohio, N. W. Pa.—The Northeastern Ohio and N. W. Pennsylvania Bee-Keepers' Association will hold their 19th annual convention at Andover, Ohio, in Chapman's Hall, Jan. 17 and 18, 1900. Boarding rates of \$1.00 per day have been secured for those attending the convention. All bee-keepers invited. Send to the Secretary for programs.
Franklin, Pa. ED JOLLEY, Sec.

California.—The tenth annual convention of the California State Bee-Keepers' Association will be held in the Chamber of Commerce, at Los Angeles, Feb. 21 and 22, 1900. It will be called to order at 1:30 p.m., Feb. 21. At this time the railroads will sell round-trip tickets to Los Angeles and return for one and one-third fare, on account of the Industrial, Mining, and Citrus Exposition, which will be held in Los Angeles. Tickets good for 10 days. Let every bee-keeper bring some hive, tool or experience that he has found valuable, and we will have a good convention.
J. F. MCINTYRE, Sec.
Sepe, Calif.

Minnesota.—The Southern Minnesota Bee-Keepers' Association will meet in Winona, Jan. 23 and 24, 1900.
E. B. HUFFMAN, Pres.
Homer, Minn.

Wisconsin.—There will be a joint convention of all Wisconsin bee-keepers' societies at the 16th annual meeting of the State Bee-Keepers' Association, Feb. 7 and 8, 1900, in the State Capitol, at Madison, Wis. Many prominent bee-keepers will be there and take part.

Excursion rates of a fare and one-third for the round-trip, for railroad tickets purchased in the State, for over 50 cents each. Be sure to bring a certificate of each ticket purchased so it can be signed Feb. 8, in Madison, and entitle the holder to a third fare return.

The State Horticultural and State Cheese-makers' Associations will meet on the same date in the Capitol.

Don't forget the date—Feb. 7 and 8. It will pay you to attend.
N. E. FRANCE, Sec.
Platteville, Wis.

HONEY AND BEESWAX

MARKET QUOTATIONS.

CHICAGO, Dec. 12.—We quote best white comb at 15c; an occasional small lot of fancy sells at 16c; off grades of white, 12@14c; ambers, 10@12c. Extracted, 8@9c for fancy white; 7@8c for amber; 6@7c for dark grades.

Receipts are larger and the demand is not as good as it has been; most of the retailers have laid in a supply to carry them over the Christmas time.
R. A. BURNETT & Co.

CINCINNATI, Dec. 7.—There is a good demand for all kinds of extracted honey. White clover and basswood sell at 8@8½c; amber and southern, 6@7c, according to quality and package. Fancy comb honey in no-drip shipping-cases sells at 15@16c; darker grades hard to sell at any price. Beeswax, 25c.
C. H. W. WEBER, Successor to Chas. F. Muth & Son and A. Muth

KANSAS CITY, Dec. 9.—We quote No. 1 white comb, 13½@14c; No. 2, 13@13½c; No. 1 amber, 13@13½c; No. 2, 12@13c. Extracted, white, 7½@8c; amber, 7@7½c; dark, 5½@6c. Beeswax, 20@22c.
C. C. CLEMONS & Co.

BUFFALO, Jan. 5.—Market bare of fancy white one-pound comb honey, and selling at 15@16c; fair to good, 12@14c; buckwheat, dark, poor, etc., 8@10c. Fancy pure beeswax, 28@30c.
BATTERSON & Co.

NEW YORK, Dec. 10.—Demand is very good for all grades of comb honey. Receipts are somewhat light and not up to former years. We quote:

Fancy white, 15 cents; No. 1, white, 13@14c; amber, 11@12c; and buckwheat, 9@11c, as to quality. Extracted remains firm at following prices: California white, 8½c; light amber, 8c; white clover and basswood, 8c; amber, 7½c. Very little trade for extracted buckwheat as yet. Southern, fancy, 7½c per pound; other grades, as to quality, from 7c to 7½c gallon. Beeswax quiet at 26@27c.
HILDEBRETH & SEORLEEN.

SAN FRANCISCO, Dec. 20.—White comb, 11¼@12¼c; amber, 8@10c. Extracted, white, 7½@8c; light amber, 7@7½c; amber, 5@5½c; Beeswax, 26@27c.

There is no chance for extensive trading in this commodity at present, supplies having been reduced to small proportions. A sailing vessel clearing the past week for England carried 125 cases extracted. Prospects for coming season's yield are considered very good for this early date.

CLEVELAND, Dec. 1.—Fancy white, 16@17c; No. 1 white, 15@16c; No. 1 amber, 13@14c; No. 2 amber, 12@13c; buckwheat, 9@10c. White extracted, 8@9c.
A. B. WILLIAMS & Co.

BOSTON, Dec. 8.—We quote as follows: Fancy white, 16c; A No. 1, 15c; No. 1, 13@14c; buckwheat will not sell in this city. Extracted, light amber, 7@8c.

There is very little now to report in the line of our honey market. The retail trade are loath to pay the higher prices and are buying in a very small way, still the demand is fully equal to the supply.
BLAKE, SCOTT & LEE.

ALBANY, Dec. 10.—We quote: Fancy white comb, 15c; No. 1 white, 13@14c; mixt, 11@13c; buckwheat, 10@11c. Extracted, white, 8@9c; mixt, 6½@7c; dark, 6. Beeswax, 26@28c.
MACDOUGAL & Co.

Successors to Chas. McCulloch & Co.

OMAHA, Jan. 4.—Prices remain unchanged. Fancy white is still moving slowly at 14@14½c. Extracted, white, 8½c. Now that holiday trade is over and dealers have taken their inventory, they soon will be thinking of replenishing their stock and more lively trade is anticipated in the near future, but no material advance is looked for during January.
PETYCK BROS.

DETROIT, Dec. 11.—Fancy white, 15@16c; No. 1, white, 14@15c; dark grades, 10@12c. Demand good and supply light. No extracted in market. White would sell for 8@8½c. Beeswax, 23@24c.
M. H. HUNT & SON.

WANTED.—Extracted honey all kinds; mail sample and price expected delivered at Cincinnati. I pay spot cash on delivery.
C. H. W. WEBER,

Successor to Chas. Muth & Son and A. Muth.
404½ 2146-48 Central Ave., Cincinnati, O.

Wanted! Your HONEY
We will buy it, no matter where you are. Address, giving description and price,
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—IN—
BOOK
STORES

NEWS AND GOSSIP OF A NEW BOOK ON THE BIBLE have been current in book and Christian circles everywhere for some months. In its authorship was to be combined the superb talents and literary abilities of three of the greatest lights in the world of religious literature.

The book is about to appear and on its title page in collaboration as authors are found the names of that most popular of all writers, IAN MACLAREN (Rev. John Watson), together with H. M. WHARTON, D.D., the great Evangelist, and J. WILLIAM BUEL, Ph.D., one of the most prominent and popular writers on Biblical subjects. A MASTERPIECE INDEED must be the book which calls to its creation such a combination of unmatched talents. IT IS A MASTERPIECE—and it is good news we bring our readers when we tell them that after the most persistent endeavor and the most industrious and earnest negotiations with the Publishers, this paper is one of a syndicate which has secured the entire first edition for distribution among their subscribers, not as a means of winning profits, but to encourage the people to become regular readers, because of the unusual privileges which are offered regular patrons.

The book is entitled "THE GOLDEN MORNING," and while it was intended to be a \$5.00 book, and has everything about it—authorship, illustrations, paper, printing and binding—to warrant that price, we have, after many objections and refusals, made terms whereby **WE ARE IN POSITION TO OFFER IT TO OUR READERS AT A GREAT REDUCTION.** It contains nearly 800 pages and over 300 superb illustrations. It is printed with clear type on coated paper, and is bound in beautifully illuminated covers, with gold and colored stamping.

IT IS IN REALITY THE BIBLE IN STORY FORM arranged so as to assure a perfect understanding of THE GREATEST OF ALL BOOKS even by little children. All ambiguous and obscure phrases and descriptions have been put into language which makes them clear as noon-day. The historic events have been arranged in their proper order, and the story is made continuous and of absorbing interest throughout. Poetical description so freely used in the Bible, and the many Parables, have all received analysis and now appear as plainly told tales which need no interpreter or explanation.

Hundreds of artistic and accurate pictures have been used to embellish its pages and fix in the mind of reader or student the scenes so graphically described. No book of a religious nature has ever been so sumptuously illustrated. This feature alone costing an enormous sum of money, as every drawing was made especially for this work.

It will be of highest value to the young, as from a few readings, they will get such an understanding of Bible truths and promises from this book, that it would require years for them to gather through Bible readings or study. Indeed, one of the chief claims of "THE GOLDEN MORNING" is universal popularity, is that the children will learn to reverence and love the Bible and to accept its teachings through reading this charmingly written story.

WE ARE READY TO DISTRIBUTE THIS GRAND BOOK AMONG OUR READERS who should order at once, as our portion of the introductory edition is limited. The prices are as follows, WITH POSTAGE PREPAID:

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SUPERB HALF MOROCCO, WITH BURNISHED RED EDGES \$3.75

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Michael K. Boyer of national reputation, has an article on "Poultry for Profit on One Acre;" Myra V. Norys tell what energetic women have done in "Women's Work with Poultry;" A. F. Hunter, the well-known editor, discusses the "Demand for Fresh Eggs and How to Meet It;" Jas. Dryden, of the Utah Experiment station, writes of "Pulle's vs. Hens as Profitable Layers." These are only a few of the many special articles. In addition there are many photographic illustrations and descriptions of the largest and most successful poultry farms in the world; also numerous copyrighted plans and specifications for laying and brooding houses, together with letters from over 250 successful poultry keepers reporting their experience with the Cyphers Incubators. Sent to any address for 15c. postage. Ask for Book No. 58. Address nearest office. The Cyphers Incubator Co., Chicago, Ill., Wayland, N. Y., Boston, Mass.

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N. E. Ohio, N. W. Pa.—The Northeastern Ohio and N. W. Pennsylvania Bee-Keepers' Association will hold their 19th annual convention at Andover, Ohio, in Chapman's Hall, Jan. 17 and 18, 1900. Boarding rates of \$1.00 per day have been secured for those attending the convention. All bee-keepers invited. Send to the Secretary for programs. **Ed JOLLEY, Sec.**
Franklin, Pa.

California.—The tenth annual convention of the California State Bee-Keepers' Association will be held in the Chamber of Commerce, at Los Angeles, Feb. 21 and 22, 1900. It will be called to order at 1:30 p.m., Feb. 21. At this time the railroads will sell round-trip tickets to Los Angeles and return for one and one-third fare, on account of the Industrial, Mining, and Citrus Exposition, which will be held in Los Angeles. Tickets good for 10 days. Let every bee-keeper bring some hive, tool or experience that he has found valuable, and we will have a good convention. **J. F. MCINTYRE, Sec.**
Sespe, Calif.

Minnesota.—The Southern Minnesota Bee-Keepers' Association will meet in Winona, Jan. 23 and 24, 1900. **E. B. HUFFMAN, Pres.**
Homer, Minn.

Wisconsin.—There will be a joint convention of all Wisconsin bee-keepers' societies at the 16th annual meeting of the State Bee-Keepers' Association, Feb. 7 and 8, 1900, in the State Capitol, at Madison, Wis. Many prominent bee-keepers will be there and take part.

Excursion rates of a fare and one-third for the round-trip, for railroad tickets purchased in the State, for over 50 cents each. Be sure to bring a certificate of each ticket purchase so it can be signed Feb. 8, in Madison, and entitle the holder to a third fare return.

The State Horticultural and State Cheese-makers' Associations will meet on the same date in the Capitol.

Don't forget the date—Feb. 7 and 8. It will pay you to attend. **N. E. FRANCE, Sec.**
Piatteville, Wis.

HONEY AND BEESWAX

MARKET QUOTATIONS.

CHICAGO, Dec. 12.—We quote best white comb at 15c; an occasional small lot of fancy sells at 16c; off grades of white, 12@14c; ambers, 10@12c. Extracted, 8@9c for fancy white; 7@8c for amber; 6@7c for dark grades.

Receipts are larger and the demand is not as good as it has been; most of the retailers have laid in a supply to carry them over the Christmas time. **R. A. BURNETT & Co.**

CINCINNATI, Dec. 7.—There is a good demand for all kinds of extracted honey. White clover and basswood sell at 8@8½c; amber and Southern, 6@7c, according to quality and package. Fancy comb honey in no-drip shipping-cases sells at 15@16c; darker grades hard to sell at any price. Beeswax, 26c. **C. H. W. WEBER,** Successor to Chas. F. Muth & Son and A. Muth

KANSAS CITY, Dec. 9.—We quote No. 1 white comb, 13¼@14c; No. 2, 13@13½c; No. 1 amber, 13@13½c; No. 2, 12@13c. Extracted, white, 7½@8c; amber, 7@7½c; dark, 5½@6c. Beeswax, 20@22c. **C. C. CLEMONS & Co.**

BUFFALO, Jan. 5.—Market bare of fancy white one-pound comb honey, and selling at 15@16c; fair to good, 12@14c; buckwheat, dark, poor, etc., 8@10c. Fancy pure beeswax, 28@30c. **BATTERSON & Co.**

NEW YORK, Dec. 10.—Demand is very good for all grades of comb honey. Receipts are somewhat light and not up to former years. We quote:

Fancy white, 15 cents; No. 1, white, 13@14c; amber, 11@12c; and buckwheat, 9@11c, as to quality. Extracted remains firm at following prices: California white, 8½c; light amber, 8c; white clover and basswood, 8c; amber, 7½c. Very little trade for extracted buckwheat as yet. Southern, fancy, 7½c per pound; other grades, as to quality, from 70c to 75c gallon. Beeswax quiet at 26@27c. **HILBRETH & SEGELKEN.**

SAN FRANCISCO, Dec. 20.—White comb, 11½@12½c; amber, 8@10c. Extracted, white, 7½@8c; light amber, 7@7½c; amber, 5@5½c; Beeswax, 26@27c.

There is no chance for extensive trading in this commodity at present, supplies having been reduced to small proportions. A sailing vessel clearing the past week for England carried 125 cases extracted. Prospects for coming season's yield are considered very good for this early date.

CLEVELAND, Dec. 1.—Fancy white, 16@17c; No. 1 white, 15@16c; No. 1 amber, 13@14c; No. 2 amber, 12@13c; buckwheat, 9@10c. White extracted, 8@9c. **A. B. WILLIAMS & Co.**

BOSTON, Dec. 8.—We quote as follows: Fancy white, 16c; A No. 1, 15c; No. 1, 13@14c; buckwheat will not sell in this city. Extracted, light amber, 7@8c.

There is very little now to report in the line of our honey market. The retail trade are loath to pay the higher prices and are buying in a very small way, still the demand is fully equal to the supply. **BLAKE, SCOTT & LEE.**

ALBANY, Dec. 10.—We quote: Fancy white comb, 15c; No. 1 white, 13@14c; mixt, 11@13c; buckwheat, 10@11c. Extracted, white, 8@9c; mixt, 6½@7c; dark, 6. Beeswax, 26@28c.

MACDOUGAL & Co.
Successors to Chas. McCulloch & Co.

OMAHA, Jan. 4.—Prices remain unchanged. Fancy white is still moving slowly at 14@14½c. Extracted, white, 8½c. Now that holiday trade is over and dealers have taken their inventory, they soon will be thinking of replenishing their stock and more lively trade is anticipated in the near future, but no material advance is looked for during January. **PEYCKE BROS.**

DETROIT, Dec. 11.—Fancy white, 15@16c; No. 1, white, 14@15c; dark grades, 10@12c. Demand good and supply light. No extracted in market. White would sell for 8@8½c. Beeswax, 23@24c. **M. H. HUNT & Son.**

WANTED.—Extracted honey all kinds; mail sample and price expected delivered at Cincinnati. I pay spot cash on delivery.

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NEWS AND GOSSIP OF A NEW BOOK ON THE BIBLE have been current in book and Christian circles everywhere for some months. In its authorship was to be combined the superb talents and literary abilities of three of the greatest lights in the world of religious literature.

The book is about to appear and on its title page in collaboration as authors are found the names of that most popular of all writers, IAN MACLAREN (Rev. John Watson), together with H. M. WHARTON, D.D., the great Evangelist, and J. WILLIAM BUEL, Ph.D., one of the most prominent and popular writers on Biblical subjects. A MASTERPIECE INDEED must be the book which calls to its creation such a combination of unmatchable talents. IT IS A MASTERPIECE—and it is good news we bring our readers when we tell them that after the most persistent endeavor and the most industrious and earnest negotiations with the Publishers, this paper is one of a syndicate which has secured the entire first edition for distribution among their subscribers, not as a means of winning profits, but to encourage the people to become regular readers, because of the unusual privileges which are offered regular patrons.

The book is entitled "THE GOLDEN MORNING," and while it was intended to be a \$5.00 book, and has everything about it—authorship, illustrations, paper, printing and binding—in warrant that price, we have, after many objections and refusals, made terms whereby WE ARE IN POSITION TO OFFER IT TO OUR READERS AT A GREAT REDUCTION. It contains nearly 800 pages and over 500 superb illustrations. It is printed with clear type on coated paper, and is bound in beautifully illuminated covers, with gold and colored stamping.

IT IS IN REALITY THE BIBLE IN STORY FORM arranged so as to assure a perfect understanding of THE GREATEST OF ALL BOOKS even by little children. All ambiguous and obscure phrases and descriptions have been put into language which makes them clear as noon-day. The historic events have been arranged in their proper order, and the story is made continuous and of absorbing interest throughout. Poetical description so freely used in the Bible, and the many Parables, have all received analysis and now appear as plainly told tales which need no interpreter or explanation.

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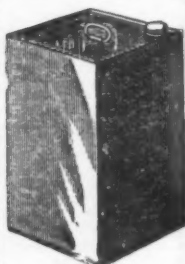
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